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CRITICISM AND NEWS.

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Original Communications.

FOUR CASES OF CHRONIC INFLAMMATORY DISEASE OF THE UTERINE APPENDAGES.*

BY LAWSON TAIT, F.R.C.S.

Mrs M. F., aged 28, a patient in the St. Luke's Home, Edinburgh, under Dr. Halliday Croom, was seen by me on December 18th, 1885, when Dr. Croom and the patient gave me the following history: She was married when about 20 years of age, and within a year had a child with an extremely severe labor and a long, lingering convalescence. She has never been well since that confinement, there having existed marked dyspareunia which has increased rather than improved. She had regular and extremely profuse menstruation accompanied with intense pain, that pain being worse before the onset of the period. She had had more or less intense intermenstrual pain excited by movement, and was made much worse by either standing or walking. For years she had been totally incapacitated from performing her domestic duties. In general appearance she was pale and anæmic, with a suffering and anxious expression of countenance, and she had been the round of all the hospitals and specialists in Edinburgh, with a uniform failure in obtaining any kind of relief. On examination, the uterus was not very large and it was distinctly retroverted and fixed in its position, any attempt at replacement giving rise to considerable pain. On each side the general matting could be felt, but no distinct tumor could be made out. The opinion I gave of the case was that the whole contents were matted together, the origin of the condition having been a peremetric attack at the time of the labor; that probably one or both of the tubes was occluded and that no kind of treatment short of removal of the appendages and the arrest of menstruation would give any satisfactory result.

As this conclusion had been previously arrived at by Dr. Halliday Croom, there was no difficulty in making up our minds to it, and, therefore, on December 19th, I operated in the presence of Dr. Halliday Croom, Dr. Keiller, Dr. Angus Macdonald, Dr. Hart, Dr. Barbour, Dr. Brewis and Professors Simpson and Chiene. I found, as is usual in such cases, that the omentum was glued on over the pelvis, and that whatever operation was done, had to be performed through an aperture made to reach the organs. The pelvic viscera were so matted together that it was with difficulty the fundus uteri could be identified, but when this was accomplished it was not difficult to trace the ovaries and tubes first on the one side and then on the other, but a great deal of manipulation was required to detach them. Finally after a great deal of trouble they were secured, the pedicles tied by the Staffordshire knot and the wound, an inch and a half in length, was closed. No drainage tube was used. The following letter, dated March 2nd, 1886, was received from Dr. Halliday Croom giving the further progress of the case: "The patient had no rise of temperature or any bad symptoms whatever. She had a perfectly uninterrupted recovery. When I saw her after the operation, I was struck by the change in her appearance. Her pinched, suffering look had gone. Her face was round, of good color and looked well and cheerful, very different from the appearance she presented when you and I saw her in December last. She still has some pain in her pelvis, especially on exertion; but it is not continuous as it used to be, and it does not interfere with her work or prevent her enjoying life, which for seven years past has been a burden. She has not menstruated since the operation, but has some leucorrhœa." When the appendages were removed and examined by the naked eye no one, unless greatly experienced in such pathological appearances, could have detected much the matter with them. The tubes were small and atrophied, and the ovaries apparently normal in size and appearance, but the moment they were put in fluid it became evident, from the masses of flocculent fibres which were attached all over their surfaces, that they had been densely adherent—they were, in fact, adhe-

*Read at the Midland Medical Society, March 3rd, 1886.

rent over the whole of the superficies. This is only one of the many illustrations in which ignorance of the disease centered in such organs may have, or actually has, led spectators to go away after such an operation with the impression that normal appendages had been removed. From the peculiarities of the operation no one except the operator can be cognizant of what the real facts are inside, as none of the adhesions can be seen by the bystanders, and the only evidence to be obtained of those adhesions is the occurrence of hemorrhage at the time of the operation (frequently very profuse) and the flocculent remains to the adhesions, which can only be seen when the appendages are floated in water, in spirits or in some other transparent fluid. Fortunately, however, I have in my possession three preparations where the whole of the pelvic contents have been removed by post-mortem examinations, and where the conditions, therefore, can be demonstrated beyond cavil.

The first preparation was presented many years ago by Dr. Littlejohn, to the Midwifery Museum, of the University of Edinburgh; and it is now impossible to obtain any history beyond the fact that the preparation was removed from the body of a prostitute. The conditions are precisely such as I found in the pelvis of the patient upon whom I operated for Dr. Halliday Croom. The Fallopian tubes can be seen to be buried in adhesions, and bands of adhesions pass in all directions, glueing the appendages into abnormal positions from which they cannot be moved, and to remove these appendages would involve detaching precisely the same extent of adhesion which I had to encounter in the case I have just narrated. In this preparation both tubes were occluded. (Three preparations exhibited to the Society.)

The second preparation I also obtained through the kindness of Dr. Littlejohn, and it has precisely the same history having been removed from the body of a prostitute some months ago; and here again, unfortunately, no history can be obtained. In this preparation the surface of the posterior wall of the uterus was adherent to the rectum, and bands of adhesion passed in every direction binding the uterus and ovaries together, the ovaries and tubes being considerably below their normal level and fastened there by adhesions. Both tubes were completely glued on to the surface of their respective ovaries; these latter were also glued down into the recto-vaginal pouch.

Curiously enough the third preparation also taken from the body of a girl who had lived a loose life, was obtained at a post-mortem made the morning on which I was announced to give an address to the Medical and Chirurgical Society of Edinburgh, on this very subject, therefore, I had the advantage of seeing the preparation quite fresh, and of obtaining from the girl's friends, especially her sister-in-law with whom she resided, an accurate statement of her past history. She had been brought up in a house of ill fame, and at a very early age had fallen into the habits of her associates. She was nominally a worker at a mill, had had an acute attack of syphilitic gonorrhœa before she was fourteen, had gone through a variety of stages of syphilitic infection and died at the age of twenty, from the bursting of a syphilitic aneurysm of the the aorta. Her sister-in-law told me that her menstruation was frequent and extremely profuse, whilst the suffering which she underwent each time amounted to agony of the most intense kind for which she had to take large quantities of spirits to obtain relief. She was totally incapacitated from moving about during the week in which her menstruation occurred and, without my asking the question, her sister-in-law volunteered the information that the curious part was that the pain was always worse two or three days before the period showed itself. A detailed description of the appendages in this case is as follows: The uterus was large and heavy, almost as if the girl had had several children although she never had been pregnant; it was retroverted and quite adherent by dense bands of adhesions (some of which are still visible) to the sacrum; it was opened on its anterior surface. The ovaries, from the presence of adhesions in every direction, were with difficulty identified, being about three times their normal size. The Fallopian tubes passed curving round them and were equally adherent and flaccid in situ. On the left side the tube was not occluded whilst that on the right side was.

Looking at the preparations now before you, it is impossible to come to any conclusion other than that women who have their ovaries and tubes so matted and adherent together, bound down, and incapable of making those movements which it is necessary for the process of impregnation should

be made, could be otherwise than absolutely sterile; the machinery of impregnation is wholly out of gear. We have, so far as I regard it, the condition of womanhood existing in three distinct functions. The first is the mere domestic and social life which all women may lead whether they be wives or mothers. They may be, and often are, eminently useful members of society leading absolutely celibate lives. Of this, of course, there is no doubt at all. There can be as little doubt that in this function of life perhaps they are as useful as in any other. The second function which woman has to fulfil is that of wife; and the third, of course, is that in which maternity is accomplished. Every one knows that the condition of wife may be occupied by a woman with perfect happiness and with a largely extended sphere of usefulness, without the function of maternity ever being even attempted. In the fulfilment of her maternal function and for the perpetuation of the race, maternity is a matter of necessity; but it requires nothing save the ordinary every-day experience of the world to know that the maternal function of woman is limited to a relatively small number. From this we may have abundant indications for our process of reasoning in dealing with questions of diseases such as those which have been and are to be relegated to one or other of these three divisions; few extend into two of them and only one into the third. The third I have already alluded to. The occurrence of disease in these women, and the onset of pelvic inflammation from whatever causes it may arise, have settled the question of maternity. It is impossible, as I have said, that women so afflicted could ever become mothers. I have attempted to undo such adhesions, and leaving the organs released in the hope that they might fulfil their functions; but I have absolutely failed; and I believe it is quite impossible for any, even the most skilled surgical efforts, to unravel those adhesions and to undo this chronic inflammation to such an extent as to make these organs fulfil their third and complete function. The pelvic organs are wholly unlike any others. You can rest an inflamed eye by a ball of cotton wool in a darkened room, and you can suspend absolutely the functions of an inflamed knee joint by rest in bed and a splint; but you have no means of putting the pelvic organs of a woman at rest short of arresting the function of menstruation.

The second function—that of the sexual duties of a wife—may be as completely performed without the uterine appendages, either congenitally absent or absent as the result of surgical interference, as with them. On the other hand we find from the united evidence of both husband and wife in a large number of these cases of chronic inflammatory disease in the pelvis, that the disease hinders more or less and in the majority of cases absolutely suspends the possibility of marital intercourse. The removal of these diseased organs, the restoration of the patient to health and the freedom from pain that she enjoys after the operation, permit of the gradual resumption of married life, and after the lapse of a reasonable time this, the second function of womanhood, may be as completely fulfilled as if she had never suffered.

The first function of womanhood—that of the domestic and social life of a woman—is again absolutely independent of the fact whether she has or has not ovaries and Fallopian tubes. A woman who has been formed congenitally defective in this matter may prove as useful a member of society as if she had been completely developed. So it is with those who have submitted to the mutilating efforts of the surgeon, and it must therefore be easily seen that as the pain which they have suffered must deprive them of that healthy power of locomotion which is essential to complete usefulness in life, so the relief from their suffering by the removal of the diseased organs restores them to the complete fulfilment of their prime function in life. The arguments, therefore, which have been and are still often adduced against this operation as mutilating and unsexing women, exist only in the impure imaginations of those who use them; they have no foundation in fact. If the function of maternity has been by the disease completely abrogated, the operation will make no difference; but if the suffering that these women have to undergo by reason of their diseased condition interferes with their marital and social duties, their restoration to health by operative interference can be regarded only as a blessing to themselves and as increasing their usefulness to those with whom they are associated.

A Remedy for Coryza.—Muriate of cocaine two grains, roasted coffee and white sugar, of each one ounce. To be taken as snuff.—*Med. Press.*

PNEUMONIA*

BY DR. GILLIES, TEESWATER, ONT.

In presenting this subject to the Association, it is not with the object of offering anything new regarding this very common and fatal disease, but for the purpose of arriving at some definite conclusions as to its nature and treatment, that we may be the better enabled to combat it, when brought face to face with it.

The report of the Registrar-General for the Province of Ontario, shows that it usually stands third or fourth on the list of the ten most fatal diseases.

There are several varieties of pneumonia, the two principal ones being the croupous and catarrhal. It is on the former that I intend briefly to offer a few remarks on this occasion.

The specific course of croupous pneumonia according to pathologists, is as yet undetermined, and the existence of such a cause is still a matter of doubt. Among the predisposing causes age ranks high. It is met with most frequently between the age of twenty and forty, less so from forty to sixty, very frequently after sixty, when it appears to be one of the most fatal of all acute diseases that we have to do with after that period of life. Pneumonia is a wide-spread disease, it is to be found in almost every country and clime, but it is far more prevalent in those places that are subject to sudden and varied changes of temperature, than where there are extreme degrees of heat or cold.

There are certain seasons of the year in which it would appear to be more prevalent than others; of twenty four cases that I have taken notes from, six occurred during the month of March, five in April, four in December, three in February, two in May, two in June, and two in November, so that from this report by far the largest number occurs between the months of November and May. Men are more liable to the disease than women, due no doubt to the fact "that they are more exposed to causes which produce pneumonia." Everything that depresses the vital powers seems to act as a predisposing cause, as for instance unfavorable hygienic surroundings or over-crowding, debilitating habits, drunkenness, poverty, etc. Diphtheria, erysipelas, measles, and small-pox, act in a similar manner; uræmia, pyæmia, septicæmia, and all that class of diseases which depend on the retention of excrementitious matters in the blood are also powerful predisposing causes. Difficult dentition in children also acts as a predisposing cause. One attack predisposes to another; every practitioner must find it an occasional occurrence to meet with it more than once in the same individual. Of the direct exciting causes of pneumonia, a chill appears to be the most common, as for instance, going into a damp cellar whilst the body is overheated, sleeping on the damp grass, or exposing oneself to cold draughts of air whilst the body is very warm. In all my cases of acute primary pneumonia I was able to trace their origin to a chill. There are two theories advanced as to the nature or origin of croupous pneumonia: (1) "That pneumonia is a specific fever, of which the disease in the lung is only a local effect"; (2) "That it is a purely local disease of which the pyrexial and other phenomena observed are only the immediate consequences." From the following facts the second hypothesis can scarcely be maintained; experiments with the inhalation of hot air, moist warm air, icy cold air, vapors of various noxious acids and gases, the tracheal injection of caustic ammonia and mercury, and traumatism, have all failed to produce croupous, but have caused catarrhal pneumonia.

The symptoms of croupous pneumonia seem to be opposed to its being a local disorder. I have seen cases where a very small portion of lung from physical signs would appear to be affected, attended with severe constitutional disturbance, as delirium, and a temperature as high as 106°. In local inflammations there is a direct ratio between the amount of surface involved and the constitutional disturbance which attends the same. The arguments in favor of the first hypothesis are the comparative rarity of ascertainable causes for its origin, and the suddeness of the crisis while the inflammation is at its height.

According to Dr. Loomis, in his article on pneumonia, the points of resemblance between croupous pneumonia and the acute general disease are the following: "It has an initiatory chill, an orderly pyrexia, and a somewhat typical course, inasmuch as in many cases there is a day of abrupt crisis and a definite duration. The countenance resembles that of typhus and typhoid fever, very

* Read before the Ontario Medical Association, Toronto, June 1886.

frequently there are herpetic eruptions, and the kidneys are more frequently affected than can be considered as accidental. The head symptoms very much resemble the condition that accompanies the exanthems. It appears at times like an epidemic; last spring I had no fewer than seven cases under observation at the same time, two in one house, brother and sister." Dr. Loomis also states, in the same article, that the resemblance of pneumonia to the acute general disease is to be found for the most part in its nervous phenomena, and that the complications which render pneumonia dangerous are those which interfere directly with the muscular power of the heart or diminish its nerve supply. Dr. Wilson Fox says the most probable hypothesis to explain the origin of pneumonia is that of an altered composition of, or the existence of some morbid material in the blood. Sturges places pneumonia in a "middle place between the specific fevers, so called, and the local inflammations, and adds that it has something in common with both." "The late Dr. Austin Flint of New York, was of the opinion that it is essentially a fever of which the pneumonia is the anatomical characteristic. Pneumonic fever, is as appropriate as the term enteric as applied to typhoid fever." From the collective investigation report upon pneumonia, as given by the *British Medical Journal*, the abstract is, to a certain extent in favor of the opinion that pneumonia is a disease of a peculiar nature, including other elements than simple inflammation of the lungs.

The treatment of pneumonia has given rise to more earnest discussion probably, than almost any other subject in modern medicine. It has been made a very battle ground between the advocates of "heroic" measures, on the one side, and the supporters of a "rational" and expectant treatment on the other. A little common sense brought to bear on the subject will assist very much in removing the difficulties. No special plan of treatment can be adopted in pneumonia, for so great are the differences in constitution, that no two cases will admit of precisely the same method of treatment. The true course I think has been indicated by Hufeland, viz., to generalize the disease and individualize the patient. Thus one group of cases will demand an antiphlogistic course of treatment, a second stimulation and support, whilst a third will be most benefitted by little or no treatment beyond a well regulated course of diet and rest.

At one time large bleedings were practised regardless of the age, constitution or stage of the disease. Dr. Hughes Bennett of Edinburgh, and Dr. Todd, showed that the treatment by bleeding is not only injurious but unnecessary in a large proportion of cases. I might say the same conclusions are generally adopted by the profession at the present day. Antimony is another remedy that was very much abused at one time in the treatment of pneumonia. That it is a remedy of undoubted value when given in suitable cases for the purpose of reducing the pulse and breathing, and in many cases checking the inflammation, there is in my mind no doubt. It should never be administered in adynamic cases, neither in the pneumonia of the aged, nor in most cases of children.

Veratrum viride and aconite are arterial sedatives of much value in pneumonia when given in appropriate cases. The alkaline diaphoretic salines are also valuable remedies to promote secretion, and to keep the mucous and cutaneous surfaces at work. Calomel was at one time very much in vogue in the treatment of pneumonia, but it is now almost discarded. In the *American Medical Digest*, of April 1866, Barthel and Muritz of St. Petersburg speak in very high terms of the use of inunctions of mercurial ointment in the treatment of croupous pneumonia. They say no matter whether the metal is supposed to reduce the excess of fibrine, diminish congestion of the lungs, and favor the resorption of the inflammatory exudate, or whether we mean to kill by its action the specific etiological factors of the disease "Friedlander's Pathogenic Microbes," the mercurial treatment is usually attended with good results.

They say for the last two years this has been the only medication employed in croupous pneumonia, and the mortality has been reduced by it from 31.4 per cent. to 6.2 per cent., which is certainly remarkable. Alongside these inunctions the only thing used was the cold compress to the thorax, and quinine and digitalis, according to the indications of the case. Blistering once so fashionable should never be used in the early stages of the disease, neither in the later stages if resolution is progressing favorably. They may however be sometimes used with advantage in the later stages in cases of delayed resolution. That blood-

letting is a very beneficial and appropriate remedy in some cases I think cannot be denied. For instance should we be called to see a young robust patient of previously temperate habits, threatened with a severe attack of pneumonia, pulse full and rapid, temperature high, great dyspnœa, with sudden engorgement of the right side of the heart, and if seen in the congestive stage, the proper thing to do is to bleed at once. This is done not so much for its curative powers as for the purpose of giving immediate relief until the proper remedies administered will have time to take effect. Under these circumstances also, if the fever be high tartar-emetic may be given combined with salines and small doses of paregoric if the cough is troublesome. The affected side should be enveloped in a warm linseed meal poultice over which a little oil may be smeared. I am also in the habit of adding a little mustard to each poultice and thus they do not require to be changed more frequently than every five or six hours. As soon as the sputa becomes free and catarrhal I stop the tartar-emetic and give liquor-ammoniæ acetatis with spirits of nitrous æther and paregoric, and sometimes digitalis. To relieve pain and procure rest especially at night, I give opium, but in the event of its being contra-indicated I give bromide of potassium in combination with chloral hydrate to produce sleep. In some cases I have used Tr. Aconite in combination with liquor-ammoniæ acetatis with very beneficial results.

The above treatment applies to sthenic cases. Now supposing we are called to attend an asthenic case, in a feeble, broken-down constitution, we must adopt a stimulating plan of treatment; opium is very serviceable in these cases as in all cases of pneumonia in the early stages of the disease, fulfilling two purposes, namely, procuring rest, and soothing the nervous system, which effects if produced render the system more tolerant of the disease, and the danger from exhaustion is diminished. Opium must not be given if there is cyanosis or much bronchial secretion, in which condition ammonia, senega, and digitalis ought to be administered. In this class, alcohol is necessary from the outset, and whiskey or brandy freely given is the only thing which will carry the patient over the crisis. Quinine can be given with advantage in these cases. I am firmly convinced that a certain proportion of cases in pneumonia will recover without treatment. I have at times been told by young men that they have had a slight cold, with cough and pain in the side, and spat up a little blood, and when asked if they had done anything for it would reply that they had done nothing, except remain in the house for a few days, perhaps take a dose of physic, and not even that always. There are certain indications to be fulfilled in all cases of pneumonia. The bowels should be well attended to, the patient should be kept in bed, and as quiet as possible in a large airy well ventilated room, and its temperature should range between 60° and 70°. The air is an important item in the treatment of pneumonia. The food ought to be fluid or semi-fluid, and should consist of a plentiful supply of eggs, milk, broth and beef-tea. In all severe cases there are two sources of danger, namely, heart failure and pyrexia, more especially the former. There is no doubt but that a large proportion of deaths are caused from heart failure, and as the pulse is the true index as to the strength of the heart, it should be most carefully watched in all cases, and if at any time we find it becoming very rapid and feeble, and especially dicrotous, alcoholic stimulants should be administered, as it is the best means we possess of sustaining the flagging heart. Ammonia, camphor, musk, and digitalis, may also be used but they are inferior to alcohol. The second indication is to lower the temperature, which may be done by cold compresses to the chest. I have had no experience myself with this form of treatment in this disease, and the profession seem divided as to its merits. I would not however think it suitable in the old or feeble, or in cases of organic heart disease, as it might produce too great a shock to the system, and the pneumonia it is said is more liable to extend from its use. Quinine is another remedy which is highly recommended for reducing excessive heat, but it must be given in large doses. During convalescence the general strength should be maintained as much as possible by tonics and restoratives, such as quinine, iron, mineral acids, and strychnia. Cod liver oil and change of air are also very beneficial in some cases. The different complications should receive their appropriate treatment.

HICCOUGH, Dr. Gibson, of Edinburgh, says, can be cured by sneezing. Another field in which the goose-quill can operate.

Correspondence.

To the Editor of THE CANADA LANCET.

SIR,—A great cry went up a short time ago against the detestable practice of cramming in all our educational establishments, and the doctors had a full voice in condemning it. Is it not inconsistent that the Medical Council still keeps up the practice to its fullest extent? For what average man can pass their *unnecessary* examinations without hard cramming. As the R. C. S. London, and R. C. P London, accept the diploma of McGill, Trinity, Toronto S. M., merely examining applicants on some select subjects, why cannot the Council do the same, examining on surgery and surgical anatomy, practice of medicine and therapeutics, midwifery and diseases of women and children, and let such examinations be as practical as possible. After passing let the student attend the practice of some hospital or some registered practitioner for one year. By such a plan you will obtain all the benefit of the modern system and retain also the advantages of the old apprenticeship. It would take another year but it would be very much to the advantage of the young doctor and also to his patients. Do those gentlemen who are urging the Council to insist that a degree in Arts should be required of every one before he commences his medical studies know what they are doing? Have they forgot, "Quos Deus vult perdere prius dementat"? Are they aware, or are they not, that the Council exists solely for the protection of the public and that the duty of the Council is to provide properly qualified medical men, and that they have nothing to do with the overcrowding of the profession? In Ontario the profession is better protected than in any state in North America, but once let it be known that the Medical Council exists, not for the benefit of the people but to make a soft place for the doctors, and a real attempt will be made to do away with the institution altogether. This degree in Arts is a robbery on the student and an imposition on the public; it compels the student to spend his time and money on what is of no value to him, and it imposes on the people by giving them inferior medical practitioners.

Now compare the two systems. Four years medical study, one year hospital practice, with three years Latin and Greek and three years medical study, and these three years wasted and all this money spent in order to keep out young men who have as much right to enter as any of us who are now practising. Depend upon this, the best will come to the surface, and let the best man win, should be our motto.

Yours, etc.,

F. C. MEWBURN, M.D.

Toronto, Aug. 9th, 1886.

To the Editor of the CANADA LANCET.

SIR,—In answer to "Enquirer" in the August No. of the LANCET, I would mention that Tyler Smith, in the third edition of his work, directs the upper blade of the forceps to be applied first, *not the lower*. Leishman, in the third edition of his work, says, "it is not a matter of much importance which blade is applied first."

Yours truly,

WM. CALDWELL.

Lakefield, Aug. 25th.

Reports of Societies.

HAMILTON MEDICAL AND SURGICAL SOCIETY—REGULAR MEETING.

Dr. Malloch exhibited a specimen—a soft catheter. The patient had been using a soft catheter for some time. One night, from some cause or other, he allowed the catheter to slip into the bladder, not thinking anything serious would result; he allowed it to remain in the bladder for six or seven days. Dr. Malloch was called to see the patient, and introduced a lithotrite, with the object of seizing the catheter and withdrawing it. This proved ineffectual. He then performed the operation of median lithotomy, and removed it with a pair of forceps; the catheter, from the length of time it had been in the bladder, was covered with a considerable amount of deposit. There was some discussion on this case, but it was decided that the median operation was preferable.

Dr. Malloch also exhibited a specimen of a calculus from the pelvis of the kidney. Patient had been suffering for about fifteen years, and had been operated upon for stone in the bladder. He first saw the patient ten years ago; she then had a

fistulous opening. One year ago he probed the opening, and detected a stone. Five months ago it was removed.

Drs. Rosebrugh, Mullin and McCargow took part in the discussion, and related some cases which had come under their notice.

Dr. Stark related two cases of puerperal eclampsia treated by pilocarpine injected hypodermically. A lengthy discussion followed, in which Drs. Leslie, Malloch, Mullin, White, Shaw and Ridley took part.

THE DOMINION MEDICAL ASSOCIATION.

The nineteenth annual meeting of the Dominion Medical Association took place in Laval University, Quebec, on the 18th and 19th of August. At the morning session of Wednesday, Dr. Sullivan, of Kingston, a past-president of the Association, took the chair. The retiring president, Dr. Osler, of Philadelphia, was unavoidably absent.

Dr. Sullivan, in a short address, complimented the Association on holding its nineteenth meeting in the ancient city of Quebec, the place in which it was organized.

Reports from the various committees were then called for, but none were given except that of the chairman of the Committee on Obstetrics—Dr. McKay.

In a short paper, the doctor touched upon the various improvements made in gynæcological surgery, and gave briefly the opinions at present held by obstetricians in the treatment of some of the more serious complications of labor.

Dr. Campbell, of Montreal, in moving a vote of thanks to Dr. McKay, took occasion to say that many members of the various committees were not notified of their membership, a fact which accounted for the absence of reports.

Dr. Graham, of Toronto, in seconding Dr. Campbell's resolution, suggested that a different arrangement might be made; that the chairman of each committee should select a definite subject for discussion, which should be introduced by him, and that the members of his committee should assist. In this way the most interesting form of discussion might be introduced. The following gentlemen guests from the United States were then introduced: Dr. Sherman, Ogdensburg, delegate from New York State Medical Society; Dr. Carrier, Jr., of Detroit, and Dr. Dawson, of Cincinnati.

Dr. Sherman then addressed the Association. He spoke of there being no dividing line between the two countries in matters of science, and gave as a proof of this the fact that Dr. Billings, of Washington, had given the address on medicine before the British Medical Association. The Association then adjourned.

The afternoon session commenced at two o'clock, Dr. Holmes, the president-elect, in the chair.

The chairman called on Dr. Cassidy to read a report on public health, in place of Dr. Yeomans, of Mount Forest, the chairman of the committee on that subject.

Dr. Cassidy, in his report, referred particularly to the question of quarantine, and to the regulations recently made by the Dominion Government. The writer concurred in the regulations made, but thought some of them should be more stringent.

It was moved by Dr. Eccles, seconded by Dr. Clark,—That the Canadian Medical Association, at the annual meeting convened at Quebec, view with pleasure the action taken by the Dominion Government in the issue of the quarantine regulations which have been put in force during the present month. We consider this prompt action to be of great importance to the general public, and moreover that, when intelligently applied, the regulations are calculated to conserve the best interests of the trade and commerce of the Dominion.

The President then read his address, which was of more than ordinary merit, and which was well received by the Association. We hope to publish it in full in our next number.

Dr. Howard, in moving a vote of thanks to the president for his address, spoke of the preliminary education of medical students. He thought that the tendency at present was to make it broad and superficial, and that in some respects it might be better to go back to the old system of requiring a deeper and more thorough knowledge of the subjects prescribed. He was in favor of making an Arts course compulsory. Dr. Sullivan, in seconding the vote of thanks, differed from Dr. Howard in the necessity for a compulsory Arts course. He did not find that Arts graduates made better students or practitioners than those who had not taken a university course.

In the Medical section, Dr. Canniff, of Toronto, was appointed chairman, and Dr. Jenner, of Picton, secretary.

Dr. Daniel Clark then read a paper on "The Medical Jurisprudence of Crime and Responsibility." The writer stated that the legal profession

was governed by precedent, whereas the views of the medical men were constantly advancing with the increase of our knowledge of brain pathology. For this reason, the views of the two professions on the subjects of crime and responsibility are now much at variance.

The writer drew the following conclusions:

1. The natural history of crime shows that brains of chronic criminals deviate from the normal type, and approach those of the lower creation. 2. That many such cases are impotent to restrain themselves from crime, as are the insane. 3. That the moral sense may be hidden from expediency by the cunning seen even in brutes until evoked by circumstances. 4. No man can make himself free from the physical surroundings in which he is placed. 5. Crime is an ethical subject of study outside of its penal relations. 6. Insanity and responsibility may co-exist. 7. Some insane people can make competent wills, because rational. 8. The monomaniac may be responsible, should he do acts not in the line of delusion, and which are not influenced thereby. 9. Many insane are influenced in their conduct by hopes of reward or fear of punishment, in the same way as the sane. 10. Many insane have correct ideas in respect to right and wrong, both in abstract and concrete, 11. Many insane have power to withstand being influenced even by their delusions.

Dr. Sherman, of Ogdensburg, spoke in the most complimentary terms of the paper. He thought that if the principles enunciated were thoroughly understood and carried out by the legal and medical profession, as well as by the laity, it would be to the great advantage of the human race.

Dr. Sullivan thought that exact rules for diagnosis should be laid down for general practitioners, and wished to know if general practitioners should presume to give evidence in courts in cases of insanity.

Dr. Clark, in reply, stated that no man should hastily give an opinion on obscure cases of insanity. Certain forms of insanity may be diagnosed by the general practitioner. There are cases in which even experts can scarcely come to a conclusion. Now that students receive lectures on insanity, the profession will shortly be in a better position to give opinions on there matters.

Dr. Dupuis then read a very interesting paper on "Diabetes Mellitus." He went over the Canadian mortality statistics, showing that diabetes exists to a much greater extent in rural districts than in cities, and is more frequently found in men than in women. The writer related several cases which had occurred in his own practice, and concluded that the best treatment was strict attention to diet and the administration of Clemen's solution of arsenite of bromine.

Dr. Ross spoke of the importance of distinguishing between simple glycosuria and true diabetes.

Dr. Graham thought that it was necessary to make three clinical divisions: temporary glycosusia, mild, and severe diabetes. The mild form was amenable to treatment, whereas the severe form was not.

Dr. Holmes had found the solution of arsenite of bromine of the greatest service in the treatment of diabetes.

Dr. Jenner, of Picton, then read an excellent paper on "Alimentation in Sickness." He first spoke of the importance of alimentation and hygiene, both in health and disease. He then stated that in many cases medicine was not needed so much as strict attention to diet and general regime.

Dr. Dupuis spoke of the difficulty of carrying out hygienic rules in country houses, as many had a prejudice against fresh air and sunlight for sick people.

Dr. Eccles agreed with the opinions expressed in this paper. He instanced the prejudice many people had against suppers. He thought that in most cases light suppers promoted health, and prevented sleeplessness.

Dr. Campbell, of Montreal, did not agree with the writer when he stated that the subject of dietetics was not taught in Canadian schools. In Montreal, at any rate, great importance was given to this branch.

The section met in the evening at 8 o'clock. Dr. Playter read a paper on Vital Statistics. He first gave the history of the origin of mortality statistics in England, and of the high state of efficiency found in that branch of the service to-day. He urged the necessity for the establishment of a bureau for statistics in this country, and stated that he would, at another time, move for the appointment of a committee to petition the Government with regard to the matter.

Dr. Graham then read a paper on Contagious Pneumonia, which was well received.

Dr. Howard had not met with a single case of contagious pneumonia. He believed that such rare cases must be of a different character from those of ordinary lobar pneumonia. He did not think that the relationship which exists between bacteria and the pneumonic disease had yet been clearly made out. Dr. Ross was also of opinion that such cases were rare, and formed a distinct disease. Dr. Foster, of Portland, related the history of two epidemics of pneumonia which had occurred in that city. In one, which was quite extensive, the cause was found in the impure water from a well which was used by the families in which the disease appeared. The well was found to have almost direct connection with the drain from a number of outside water-closets. The other epidemic occurred in a home for orphans. In the first epidemic the consolidation appeared invariably in the left apex, whereas in the latter it occurred

in the right side. All of the cases presented symptoms similar to those given in the paper.

Dr. Graham, in reply, stated that he believed in the unity of lobar pneumonia. He thought this view was confirmed by investigations into the parasitic nature of the disease. He was also of opinion that the soil upon which bacteria is grown, influences the character of these growths. He related the investigations of Dr. Steinberg in confirmation of this point.

Dr. Gardiner, of London, read a paper on, "The Inhibition of the Heart in Diphtheria." He related two cases which had occurred in his own practice, in which death had resulted from heart failure. In both cases the pulse became remarkably slow. In one it was not more than twenty-eight to the minute. He thought that these grave symptoms were brought on by irritation of the nerves of the throat at the seat of the disease and consequent inhibition of the heart. He instanced tetanus as an example of similar nerve irritation. Dr. Graham was of opinion that the phenomenon could be best explained on the supposition that a poison existed in the blood which acted on the nerve centres. He spoke of the investigation of French pathologists who found toxic principles even in normal excretions, as in urine. When that was the case, how much more likely that such principles exist in pathological states. Dr. Ross was of the same opinion on this etiology of the disease as the last speaker. He spoke of the gravity of heart failure in diphtheria. Some cases appeared to be hopeless from the commencement, but many terminated favorably. The rapid fatty degeneration of the heart might explain some cases. Dr. McDonald, of Wingham, gave instances of some cases which occurred in his own practice, and was also of opinion that fatty heart and the paralysis of that organ might explain the symptoms related by the reader of the paper.

Dr. Gardiner did not think that either fatty degeneration or paralysis could account for the phenomenon. There was a slowing of the pulse and no diminution of volume, two conditions which would not be likely to follow fatty heart.

Thursday morning.—The Association met at 10 o'clock, the President in the chair. The minutes of the last meeting were read and adopted.

The following report of the Nominating Committee was then read and unanimously adopted.

Place of meeting for the next year: Hamilton.

President, Dr. J. E. Graham, Toronto; Vice-Presidents: Ontario — Dr. Dupuis, Kingston; Quebec—Dr. Russell, Quebec; New Brunswick — Dr. Currie, Fredericton; Manitoba — Dr. O'Donnell.

Local Secretaries: Ontario — Dr. McKeough, Chatham; Quebec — Dr. Bell, Montreal; New Brunswick — Dr. Lunam, Campbellton; Nova Scotia—Dr. Trueman, Sackville; Manitoba—Dr. Chown, Winnipeg.

Chairman of Local Committees in Hamilton: Dr. Malloch.

Dr. Graham moved, seconded by Dr. Sheard, that the Committees on Medicine, Surgery, Obstetrics, and Therapeutics be abolished, and in order that this change take place at once, the by-law requiring notice of motion be suspended. This motion was carried unanimously.

Dr. Campbell then moved, seconded by Dr. McFarlane, of Toronto, that the by-law authorizing the formation of a Committee whose duty it is to make Reports at the Annual Meeting on Medicine, Surgery, Midwifery, and Therapeutics, having been suspended by a unanimous vote of the Association, the President do name at this meeting readers of addresses upon specific subjects in Medicine, Surgery, Midwifery, and Therapeutics, and that these gentlemen be at once notified of their appointment by the Secretary. In the event of the gentlemen named by the President declining the appointment, he shall have the right to name substitutes.

This resolution was carried unanimously.

The Association then divided into sections.

In the Medical section, Dr. F. W. Campbell read a paper on "The treatment of Whooping-cough by Quinine." He spoke of the obstinate and distressing character of the disease. The writer commenced to use quinine after it had been advised by Dr. Dawson, of New York. He had notes of over one hundred cases in which the remedy had produced excellent results. The essentials in the quinine treatment are, 1. The drug must be pure; 2. It must be dissolved in acid, and not disguised by syrup or aromatics; 3. It must be given freely. For young children, the dose is from five to eight grains; for adults, ten to forty grains. The writer is of opinion that whooping-cough is a parasitic disease, and that quinine acts as a germicide. He spoke also of the use of a solution of quinine in the form of spray.

Drs. Trenholme, Graham, and Gardiner took part in the discussion, and gave their testimony to the efficacy of the quinine treatment. The latter two gentlemen did not think it necessary to leave out the syrup or aromatics.

Dr. R. A. Reeve then read a paper on "Glaucoma," which was illustrated by charts of various pathological conditions of the eye in this disease. The essential pathological condition of glaucoma is an obstruction to the outflow of the secretions of the eye.

Dr. Buller stated that you may have subluxation of the lens, without glaucoma following for at least a long time.

Dr. R. A. Reeve, in his reply, condemned the free use of atropine, and considered it an occasional cause of glaucoma.

This concluded the work of the Medical section.

A general meeting of the Association took place at 2 o'clock, Dr. Canniff in the chair, as the president was absent.

Dr. McEachren, the Principal of the Veterinary College, gave an address on the "Pleuro-pneumonia of Cattle," which was illustrated by pathological specimens. The principal difference between pleuro-pneumonia in cattle and that of man is, that in the former the disease is first, and essentially, an inflammation of the interlobular connective tissue; the alveoli are only secondarily affected.

Votes of thanks were then given to the authorities of the Laval University for the use of the building, and to the railroad and steamboat companies for the courtesy shown by them to the Association.

The Association then adjourned.

A report of the Surgical Section will appear in our next number.

Selected Articles.

ON THE TREATMENT OF DIPHTHERIA.

Dr. Miller in a paper read before the American Medical Association gave the following as a summary of the nature of diphtheria, and his treatment of that disease:

Diphtheria is not croup.

1. Diphtheria is infectious. Croup is not.

2. Diphtheria is a general disease. Croup is local.

3. Diphtheria is an epidemic asthenic disease. Croup is a sthenic local inflammation.

4. Diphtheria may be followed by paralysis. Croup not.

5. Diphtheria may be complicated by albuminuria. Croup not.

6. The diphtheritic membrane involves the subjacent tissues. In croup the exudate becomes a solidifying membrane upon the mucous surface.

In the management of diphtheria it is of the first importance to recognize the infectious nature of the disease. For the protection, therefore, of the healthy, isolate the sick. The room assigned to the affected should contain only the simplest articles of furniture. Carpets, curtains and upholstered furniture should be removed. The atmosphere of the apartment should be kept at a uniform temperature of about 72°, and good ventilation should be secured without exposing the patient to draughts of air.

After the termination of the case, the thorough disinfection of the room, bedding and furniture should never be neglected, and the same may be affirmed of the clothing and persons of the attendants, and of the convalescing patient, as well.

The indications of treatment may be formulated as follows:

1. Destroy the septic germs in the blood. 2. Eliminate effete material from the system 3. Prevent the formation of, or remove the pseudo-membrane. 4. Control pain and restlessness. 5. Sustain the strength of the patient. 6. Prevent the sequelæ. 7. Perform tracheotomy (?) or intubation. The asthenic nature of the disease should be borne in mind, even in the earliest stage, that the treatment may be preventive of the possible sudden prostration which precedes the dangerous complications. The alimentary canal should be freely evacuated. This may be accomplished by exhibiting some unirritating agent, as castor oil, rhubarb, or a suitable dose of the compound cathartic pill ($\frac{1}{2}$ grain or 1 grain).

Keeping in mind the indications which have been tabulated, some combination of remedies may be devised which will meet most of the requirements of the case. And it is fortunate that the remedies from which experience justifies an expectation of benefit are not incompatible, and may therefore be grouped. It is also worthy of consideration, that medicines intended for children especially should be rendered as palatable as possible. For this purpose the syrup of lemon may be substituted for the glycerine and water in the following prescription.

The following prescription is suggested as an example of such combination:

R.	Tr. ferri chloridi.	℥j.
	Potas. chlorat.	ʒ ij.
	Acid hydrochloric dil. . .	m. xx.
	Tr. capsici.	℥ j.
	Morph. muriat.	gr. ss.
	Glycerine	℥ ij.
	Aq. destil.	ʒ ijss.

M. S. Give a teaspoonful every hour or two or three hours, according to the urgency of the symptoms.

Of course the proportions of the several ingredients will be varied in different cases to adjust the doses to the age and condition of the patient. The directions for taking the mixture given above, however, convey but an imperfect idea of the most efficient mode of using it. The patient should be required to take a drink of water, then immediately take the mixture undiluted. By this mode several indications are fulfilled at one and the same time. An efficient local application is made to the throat each time the mixture is administered, and the constitutional tonic, antiseptic and anodyne effects are also secured. The water which was taken before the medicine will be sufficient to properly dilute the remedies in the stomach, and thus prevent any irritation of that organ.

In mild cases this prescription will fill all indications, and a large proportion of cases in which this treatment is commenced early will progress and terminate as mild cases, which under some other course would prove severe and endanger life. It will be unnecessary to annoy the patient

by making other local applications. Moreover, there is good reason to assume that the paralysis which is sometimes a serious complication during the convalescence is due to impoverishment of the blood, the restoratives contained in this mixture should therefore prove a powerful preventive of this complication. Experience justifies this expectation, for paralysis will be encountered but seldom during the progress of the disease or in the convalescence.

The same may be affirmed of the effects of this mixture upon the local symptoms and upon the formation of the pseudo-membrane. The local pain, the congestion and swelling are relieved, and it is not unusual to see the forming membrane disintegrate and disappear within twenty-four hours after commencing the treatment. The earlier suitable topical applications are made to the exudate the more easily may it be removed. Unquestionably the case is sometimes made worse instead of better by the frequent resort to the probang, charged with escharotics or irritating agents. Besides, the excitement produced by this procedure must result in injury to the patient, especially when force is required to overcome the resistance offered by the child from fear and dread of the operation.

The importance of surrounding the patient with a warm atmosphere has been asserted. It is also important that the air be kept moist. The inhalation of simple warm aqueous vapor will produce benefit by its solvent effect upon the exudate, and also by allaying irritation and discomfort of the fauces. While this is being done additional benefit will be attained by charging the vapor with some agent or agents of recognized power in resolving the membrane, and also efficient as antiseptics, as aqua calcis, eucalyptus, oil turpentine. Pepsin or trypsin may have a beneficial effect in dissolving the membrane, when the ordinary remedies fail.

The steam atomizer will be found efficient in utilizing the vapor. After a certain age, no difficulty will be experienced in directing the spray into the throat. And even in cases of very young children, the timidity may be readily overcome by placing the atomizer when in use (and it should be in use while the false membrane persists) at a distance from the face, and gradually approximating it till the vapor is inhaled freely. The same object may be attained by causing the vapor, charged with the solvent, to rise from an open vessel placed contiguous to the patient.

Of albuminuria it need only be said that it is present in a large proportion of cases, and that while the kidney is large and pale, it is not indicative of the serious renal complications, as in scarlatina, and it is exceptional when any serious effects from it become chronic. Iron and chlorate of potash would seem to be indicated for this phase of the case, and these are contained in an eligible form in the prescription already given Too much stress cannot be laid upon the importance of sustaining the strength by the liberal use of nourishment. Though the patient may feel no desire for food, he may be induced to take it, if it is offered in a concentrated fluid form, which should be repeated at short intervals. In conditions of great depression, stimulants are indicated. It is a fact of common observation that alcholic stimulants are well borne in diphtheria, and that intoxication is not likely to follow even the free administration of whiskey. So beneficial are stimulants, that the free use of spiritus frumenti is considered by some as specific treatment (?) in diphtheria. Under the same condition it will be natural to cast about for other active tonics, and quinine will be among those selected. That quinine produces any specific action in diphtheria is problematical, and when administered, it should be for its tonic effect.

Strychnia is the remedy frequently prescribed for the removal of paralysis complicating diphtheria, as if this drug had some specific influence in restoring muscular power. Query—Can strychnia be relied on for restoring innervation in this, as in some other forms of paralysis? Are not the indications here first, to establish assimilation, and second, to improve the quality of the blood?

Galvanism is an agent of undoubted value in the treatment of these paralyses, by stimulating nervous power, by exciting muscular contractions and by increasing the nutrition of all the structures involved in the paresis. Should tracheotomy be performed, even in extreme danger of the patient in diphtheria? It is true this operation has been performed many times when the patient was in great peril; and sometimes recovery has followed. It would be just to say that the recovery in at least a minor proportion of cases has been due to the operation. This, however, has happened so seldom that the procedure has long been regarded by the laity with disfavor; and were the whole truth stated, undoubtedly the profession regard tracheotomy as the forlorn hope. And furthermore, there is reason to believe that in a proportion of cases, the fatal result might have been avoided, had the surgical interference not been interposed.

When we review the past we can see but little in the results of tracheotomy that is reassuring. Any procedure, therefore, which promises equal benefits, and is at the same time free from the objections indicated, will surely be hailed as an improvement. Intubation, it is now claimed, offers these advantages. Since the revival of this procedure by Dr. O'Dwyer a little more than a year ago, it has been tested in many cases, and the results as reported have been so satisfactory as to encourage the hope that it will soon supersede tracheotomy, at least in the majority of cases. It

is certainly free from the objections which render cutting so unpopular. The consent of the parents is easily obtained. No solution of the continuity of tissues is produced, to add to the complications which already exist. It is therefore bloodless. It is not particularly difficult of performance. The relief is many times immediate.

VALVULAR DISEASE OF THE HEART

Probably a considerable number of the readers of the *Hospital Gazette* will soon be encountering the problems of actual practice. These, they will find, are not so simple as the conundrums of the examination table; and answers which may be quite satisfactory to the examiners may scarcely be so successful with the anxious friends of the patients under their charge.

It is well not to underrate the gravity of any case. It is equally desirable not to overrate it. It is all very well to comprehend the significance of a cardiac murmur; but it is not well to build upon it a superstructure which is not warranted by the facts of the case, and which tumbles down in time.

Before the examiner the full significance of a cardiac murmur must ever be held up conspicuously. It indicates an intimate acquaintance with the pathology of the subject. But when a murmur is encountered in practice, it is not well always to make the most of it. Our knowledge of valvular disease of the heart is comparatively recent, and, consequently, our teaching has not escaped from the thraldom of our early text-books. The first observers have made the diagnosis from the physical signs, followed the case to the *post-mortem room* in order to see how far the diagnosis was correct. The dead-house was the natural sequel to every case recorded, in order to prove the value of careful physical examination. This was the infancy of knowledge. But at the present time our acquaintance with valvular lesions is almost as complete as it is ever likely to be—unless some new method or means of examining the heart be discovered. With the requisite knowledge and habitual carefulness in diagnosis, any ordinary valvular lesion of the heart ought not to present any difficulty.

And yet we find Geo. Balfour, a recognized authority on disease of the heart (who thinks we can often recognize the condition of the heart in life almost as accurately as if we had the organ before us), writing as follows about the coming and going of murmurs—accepted at the examination table as almost infallible guides:—"It not unfrequently happens that a patient presents himself with a note from his ordinary medical attendant stating that so-and-so labours under cardiac valvular disease, and yet on careful examination no murmur can be detected." Yet possibly, even probably, the ordinary medical attendant has not been careless, or in error. How is this explained? Balfour says it is due to "the very remarkable manner in which even murmurs dependent upon recognised organic lesions change and vary, and not infrequently disappear, the lesion of course still remaining." From this it would seem that recognized valvular disease may not be marked by a persistent, unvarying, ever-present murmur, which can implicitly be trusted.

But it may be well to consider briefly how far murmurs may exist without evidence of valvular mischief, and how far such valve-change may exist without giving rise to a murmur. In other words, to review the matters of murmurs and their production. It is chiefly with stenotic or obstructive murmurs that mistakes are made in practice. A murmur may be due to rough edges, or growth on the free borders of the valve-curtains, and be heard always loud and unmistakable; and yet there may be no valid evidence of actual disease. Or some displacement of the heart, as by pleuro-pericardial inflammation, may so modify the blood-current as to give rise to a loud murmur—and nothing more. Or there may be an exocardial murmur present. Such are the common pitfalls, as experience tells.

But even regurgitant murmurs are not always trustworthy. Prof. Gairdner, of Glasgow, some years ago, put on record a case of aortic regurgitation where shortly before death the characteristic murmur disappeared. Yet this is the most stable and trustworthy of all murmurs. And in this case a well marked amount of valvular disease was found on post-mortem examination.

It is not, however, with rare cases, but with the every day matters of ordinary practice, this article is chiefly concerned. A murmur is heard—a distinct well-marked murmur, accepted as indicative of a certain form of mutilation, at a certain valvular orifice. The practitioner is fairly justified in diagnosing a certain form of valve lesion. There is no mistake about the diagnosis. Any authority upon the subject subsequently consulted at once confirms the diagnosis. There is no conflict, no questioning about the diagnosis. But the prognosis is a very different affair.

The general practitioner has had many matters to attend to, and valvular lesions of the heart have not specially attracted his attention. Consequently, when brought face to face with a concrete valve-lesion he does not feel quite at home with the subject. The diagnosis he is fairly clear about. As to the existence of a lesion, yes, but as to all the outcomes thereof, such as the extent of injury, the amount of danger to life involved therein, how far the patient is disabled, and what amount of effort is alone safe and compatible with existence? These are subjects on which questions will be asked and answers expected. How are these questions to be answered?

The first matter to recognize is this—the earlier a valvular lesion is established, the more complete is the muscular compensation set up, aud the better it is maintained. Thus, the establishment of a mitral lesion in childhood carries with it a far better prognosis than an equal lesion set up by gout or an attack of bronchitis in middle age.

The next is the extent of the lesion. The smaller it is, the easier it is compensated and the easier it is maintained. A small lesion requires no great compensation; and the less the compensation the longer it can be upheld; whereas, a large valve lesion will soon wear out any compensation the system can set up.

My experience in connection with valvular lesions of the heart is that their gravity is never underestimated. The general practitioner never errs upon that side of the wall. But, as all cases are not of the gravest order, a certain amount of over-estimation is experienced. A murmur is found indicative of a certain form of injury at a certain valve; and from this ensue orders so restrictive that life is made a burden to the patient. Sooner or later some of the friends insist upon a consultation with some recognised authority in the subject. I trust that as regards myself, like Dr. Geo. Balfour, I have pointed out how easily some difference of opinion may be created by the varying characters of murmurs—even when unquestionably connected causally with valve-changes. But even when trying one's best not to invalidate the previous opinion, it is not always possible to avoid doing so if conscientiously compelled to relax the rigorous regulations laid down by the original medical attendant.

It would do no real good to attempt to bolster up the first opinion. A man's skin is nearer to him than his shirt—to put the matter on the lowest grounds of selfishness. A consultant has his own reputation to guard. It is far more disastrous for him to trip in his own specialty than for a general practitioner to make a false step. Facts and time would simply disprove his opinions as ruthlessly as that of some other man less known in connection with the subject.

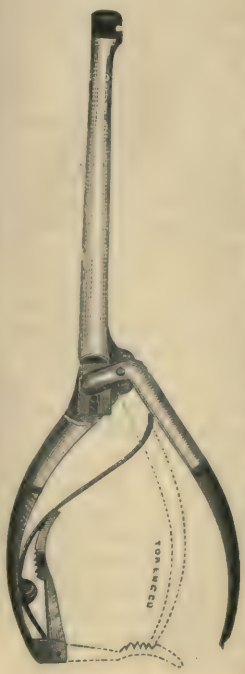
What, then, remains is to urge upon the general practitioner more caution in the first place. Young people with mitral lesions are not liable to die suddenly, as a rule. A quiet life of indoor employment is quite compatible with length of days in the case of a valvular lesion of moderate extent; only great mental shock or severe muscular exertion must be avoided. It the patient can get about without much distress, the lesion is not a large one; and with care, proper nutrition, and tonics (when required) the patient is not cut off from the possibility of making old bones.

One great matter to be clear about is this: fatty degeneration is a senile change only found in young persons under very peculiar circumstances. It is not until such necrobiosis is well established that the heart is apt to come to a standstill in diastole. The cardiac impulse may be weak and the first sound feeble, but this combination is insufficient to justify or warrant the conclusion of fatty degeneration. The heartwall may be temporarily weak and ill-nourished; and when this is the case with a valvular lesion, especially at the mitral orifice, symptoms of dropsy are liable to show themselves amidst other evidences of cardiac asthenia. But rest in bed, with careful feeding, will usually permit of the heartwall regaining its lost vigour, and with that the morbid phenomena disappear.

This may occur again and again until at last degeneration of the muscular ball interferes and prevents recovery, when the patient necessarily sinks. But the final ending is often long delayed; and in the earlier attacks rest in bed, good food, and remedial agents which increase the energy of the cardiac contractions will often give very satisfactory results. If instead of a hopeless prognosis which palsies energetic treatment, some medical men would pick up heart of grace and try what can be done, they would attain results often startling and gratifying to themselves and the friends of the patient; and, further, creditable to the reputation of the profession as a body.—FOTHERGILL, *in Hospital Gazette.*

HAGEDORN'S NEEDLES AND NEEDLE-HOLDER.

Dr. Powell has communicated the following description from the *London Lancet* of an excellent needle-holder and needles, devised by Dr. Hagedorn of Magdenburg. This instrument is used by himself and other gentlemen in the city.



"The needles are semicircular in shape, the section of the stem being an oblong parallelogram of the same thickness throughout its length. The point has a single cutting edge on its convex surface. The advantages which these needles have over the curved needles in general use are that the puncture they make is a fine slit at right angles with the edge of the wound to be united, and, therefore, when the suture is tightened the edges of the puncture are approximated, not made to gap;

the puncture of the needle is also at right angles at the surface of the wound, and the suture approximates the whole thickness of the parts through which it is passed with equal tension; and the needles are stronger and much less liable to break when held in a holder than those in common use.

The needle-holder is very simple in construction; it grasps the flat surfaces of the needle, and can seize and hold the point as securely as any part of the stem. The jaws are closed with a lever handle, which can be fixed by a rachet. For special purposes these holders are made of different lengths and shapes, but anyone who uses them will soon be convinced of their great convenience and merit."

Ear Disease in Diphtheria and Scarlet Fever.—Dr. Thomas Barr, of the Glasgow Ear Hospital, concluded the clinical history of a case of scarlet fever, complicated with nasal and pharyngeal diphtheria, acute suppuration of both middle ears, rapid destruction of tympanic membranes, serious loss of hearing, facial paralysis, and abcess of the lachrymal sac, ending in recovery, with the following remarks:—"1. This case bears out what Burckhardt-Merian has especially drawn attention to—namely, that scarlet fever, when complicated with or followed by diphtheria, is apt to give rise to a most destructive type of disease of the ear. It is probable that in such cases there is a real propagation of the diphtheritic membrane along the Eustachian tube to the tympanic cavity, and even to the external auditory canal. We have not simply to deal with an ordinary collection of purulent secretion in the tympanic cavity, with rupture of the membrane and evacuation of the pus; we have rather to do with a rapidly destructive ulcerative process, which, as is shown by this case, denudes the organ of the tympanic membrane in a very short time. There is reason to believe that scarlet fever alone does not produce such havoc; the addition of the diphtheritic poison seems to impart that destructive tendency to the ear complication which may terminate in deaf-mutism, or even lead to a fatal issue. 2. From the favourable course of the facial paralysis in this case, we need not despair of recovery from this complication of purulent disease of the ear. In children, not only is the facial nerve, as it lies in its osseous canal on the inner wall of the tympanum, in close juxtaposition to the mucous membrane of the tympanic cavity, but the bony walls of this canal are very frequently defective when the neurilemma of the nerve is in actual contact with the mucous membrane. It is easy to understand how, with such an anatomical arrangement, the pressure of granulation tissue, swollen mucous membrane, or even of secretion, may produce paralysis of the facial nerve without ulcerative disease of the bone, and therefore without the same gloomy prognosis. 3. The recovery of fair hearing also illustrates a fact which is not unfrequently observed—namely, that fair hearing may exist even when the tympanic membrane is almost quite destroyed. What is of more importance than the presence of the tympanic membrane is a normal mobility of the fenestral structures. If these structures, with the stapes, are not thickened, bound down by adhesions, or subjected to pressure, fair hearing power may be enjoyed, although the membrane, with even the malleus and incus, should have been swept away. 4. This case also shows in a striking way the value of treatment by rectified spirit in purulent disease of the middle ear associated with granular excrescences." The following is Dr. Barr's description of the treatment pursued in the case referred to above:—Diluted rectified spirit was employed in the strength of one-third of spirit and two- thirds of water. The following process was carried out every eight hours:—(1) Careful syringing with a warm solution of boracic acid; (2) removal of all the moisture in the interior of the ear with absorbent cotton on a cotton holder; (3) instilling into the ear fifteen drops (warm) of the diluted spirit; (4) allowing it to remain in the ear, while the child lay on the opposite side, for fifteen minutes; (5) drying the canal with cotton, and then placing a plug of salicylicated cotton in the orifice of the ear. This treatment was, of course, applied to both ears. In addition, and in order to ensure still more thoroughly the complete expulsion of the purulent secretion, Politzer's method of inflating the middle ear was performed once a day after the syringing. The nasal passages were also syringed daily with a tepid solution of chlorate of potash. The strength of the spirit was gradually increased to equal parts of water and rectified spirit, but when employed stronger than this the pain excited by it compelled us to return to the weaker form. This method of treatment very soon proved itself to be the most efficient. The discharge perceptibly diminished; the granulation tissue began to shrink; and the hearing power became more acute."—*Lancet.*

Third Stage of Labour.—I believe that the great facts in the natural history of the expulsion of the placenta and membranes are that they are not separated for some time after the birth of the child, that they are then expelled by uterine contraction and retraction, that the placenta is expelled from the uterus usually edgeways, and that no access of air occurs into the genital tract. In the management of a normal third stage, the patient should therefore occupy the dorsal posture, and the accoucheur should grasp the uterus with his left hand to ascertain its tone. When this is good, he retains his grasp merely to note if the

uterus relaxes. When good pains come on, I do not consider it necessary that these should be helped by the practice of expression or what is known as Crede's method. In a normal case, the risk is that the placenta, bulky as compared with the membranes, may be squeezed out too soon, and parts of the membranes left behind. When, however, the placenta remains in the uterus half an hour after the delivery of the child, expression should be tried, but only with the left hand. After some practice, one can tell whether the placenta can be expressed, or whether adhesions are present. In the former case, the accoucheur feels the uterus diminishing in bulk as the placenta is expressed; whereas, in the latter case, no impression is made on it by moderate pressure. When the placenta is in the vagina (a condition recognised by the altered shape of the uterus), but does not soon appear at the vaginal orifice, slight downward pressure in the axis of the brim will help its expulsion. If more than slight pressure is needed, the question must then arise whether the retention is not due to non-separation of part of the membranes. The cleansed fingers may be passed into the vagina, the presenting part of the placenta laid hold of, and gentle traction in the proper axis will effect delivery. When the placenta is detained in the vagina, it is sometimes convenient to place the patient in the semi-dorsal posture, to draw down and back the posterior vaginal wall with the cleansed fingers, so as to straighten it; and then by slight downward pressure, with the external hand in the axis of the brim, to effect delivery. In those cases where uterine action is feeble, expression is of the very greatest value. It then imitates the natural process, and places such a case on a level with the normal. The uterus should be grasped with the left hand as fully as possible, the thumb being in front and the fingers behind. It is then squeezed firmly in the direction of the line joining the finger and thumb, without any downward pressure. In partial adhesions of the placenta, or in adhesion of the membranes, the practice of expression is in the highest degree dangerous. The non-adherent portion is separated and forced down and out, while bits of the placenta or membranes are left behind, exposing the patient to septicæmic risks. When morbid adhesions exist, the accoucheur must separate them manually, using all antiseptic precautions. The hands must be thoroughly cleansed with corrosive sublimate solution (1-2000), and a vulvar and vaginal douche of 1-4000 given. After the separation, the douche of 1-4000 must be repeated, the amount of introduction of the tube depending on the extent of the internal manipulation. In this, as well as in a natural case, it is well to have the diapers used in the puerperium dipped in the corrosive sublimate (1-2000), and dried, or the discharge received into sublimated wood-wool wadding.—*Brit. Med. Journal.*

ERYSIPELAS AND PUERPERAL FEVER.—An important paper on the relationship between these two diseases has been published by Professor Gusserow, of Berlin. He remarks that it has been believed, especially in England, that erysipelas and puerperal fever were closely allied, if not identical. This doctrine rested on the propositions which were assumed to be facts, that erysipelas and puerperal fever were found to prevail together, that puerperal fever could produce erysipelas, and erysipelas puerperal fever; and that anatomically, according to Virchow, in some forms of puerperal fever the changes in the cellular tissue of the pelvis were identical with those produced by erysipelas Dr. Gusserow thinks that our knowledge on the subject is very superficial and defective. The observations adduced in support of the propositions above mentioned, although enough to make imperative the greatest care in protecting the lying-in woman from the contagion of erysipelas, are yet far from being sufficient to prove the pathological theory which is based upon them. Dr. Gusserow is of the opinion that there is no connexion between puerperal sepsis and erysipelas. In the first place, a great number of cases of erysipelas during pregnancy, have been seen, and our author has seen erysipelas come on in pregnancy, and the patient delivered while the disease was at its height; and yet there was nothing abnormal about the lying-in; the patient suffered from ordinary erysipelas, and nothing more. He has seen erysipelas come on during pregnancy; the pyrexia lead to the death and expulsion of the child, and the mother subsequently die; when the post-mortem showed that the puerperal process was simply a complication of the erysipelas, no sign of disease of the genital organs being found, but post-mortem appearances like those usual in erysipelas. Dr. Gusserow has also seen erysipelas appear as a complication in childbed, but it ran its course just as in any other subject, the course of the lying-in being in no way influenced by it. He has seen erysipelas coming on during childbed prove fatal, and the post-mortem appearances were then simply those of fatal erysipelas, no sign of disease of the pelvic organs being present either during life or after death. Instances have moreover been recorded in which, during an epidemic of puerperal fever in a lying-in hospital, some patients have been affected with erysipelas, and other cases in which erysipelas and puerperal fever co-existed in the same patient. Both as to symptoms and post-mortem appearances the phenomena of the two diseases were quite distinct; they were combined, but did not modify one another. Lastly, Professor Gusserow urges that we have now the proof, in the existence of a special micrococcus peculiar to it, that erysipelas is a specific disease. He has failed in experimental inoculations of the erysipelas-coccus under the skin and into the peritoneal cavity, to produce phenomena anything like those of sep-

ticæmia. The erysipelas coccus produces erysipelas, and nothing else. Redness and swelling of the skin, which undoubtedly are sometimes present in septicæmia, ought not to be called erysipelas unless the erysipelas coccus is present.—(*Achiv f. Gynakologie.*)

Management of the Secundines.—So long as retained placenta is in the uterus or vagina the life of the woman is in jeopardy, and she may at any time be attacked with profuse hemorrhage, septicæmia, and pelvic cellular or peritoneal inflammation. When she has apparently recovered, a placental or fibrinous polypus may form in the uterus, or she may suffer from subinvolution, hyperplasia, etc. Several women in Louisville have died within a few years from septicæmia, with pelvic peritoneal and cellular inflammation, or hemorrhage, caused by a retained placenta.

It may be urged that puerperal septicæmia is always exogenetic in its origin, but we know that a decomposed retained placenta is a prolific cause of the disease, and that its removal or disinfection is the only rational treatment. In abortions before the end of the second month, if hemorrhage ceases, no effort should be made to remove the membranes, unless they protrude into the vagina and can be taken away without introducing the fingers or instruments into the uterus. These little membranes are generally innocuous, and will be separated and expelled without causing dangerous complications. But if pregnancy has continued until a placenta has formed, expectation should not be practiced. If in abortions after the second month the placenta is not expelled in twenty or thirty minutes, it should be removed, unless the woman is threatened with collapse or syncope from hemorrhage, and when, from the absence of arterial pressure, hemorrhage has stopped. We may then wait until she has recovered from shock, or until there is decomposition of the membranes, or a recurrence of hemorrhage.

If the operation is done without delay the os will usually be dilated or dilatable, and a finger or fingers may be easily introduced into the uterus. There is no instrument that can be substituted for the fingers, though it may sometimes be necessary to use other means to dilate the os. Tents should, if possible, be avoided, and if the os cannot be dilated with the fingers, Ellinger's dilator, or my modification of Leonard's dilator, or Molesworth's dilator, may be used. The operation is seldom difficult, and with the patient anæsthetized, any part of, or the entire hand, may be introduced into the vagina, enabling us to examine all the uterine cavity with the fingers and to remove every part of the placenta and membrane. Hemorrhage will then stop, and there will probably be no other untoward symptom. Of course our hands should be thoroughly disinfected, but this should be done in every case of delivery. In premature labor and in labor at term, the placenta is more easily separated than in the earlier months, and is less frequently retained. I fail to recognize a single fact to justify expectation in the management of the third stage of labor in the latter months of pregnancy, and while I do not believe it usually necessary to supplement or supplant nature in an effort to remove the membranes immediately after the child is born, I do not think the placenta should be left in the uterus more than twenty to thirty minutes, and it should be removed from the vagina immediately.

The membrane can generally be removed by judicious expression during labor pains, but if this fail we may assist expression by introducing some fingers into the vagina and gently drawing upon the end of the folded placenta. With a reasonable degree of care this treatment would neither cause septicæmia nor invert the uterus, and such accidents could only result from criminal ignorance or carelessness in the physician. Unless uterine inertia follows the birth of the child there is no necessity for attempting expression until the uterus contracts in an effort to expel the placenta. We should then follow the Credè method, being careful to express only during a contraction. But it is always safe treatment to keep a hand over the uterus to see that it does not relax, and to encourage it to contract by kneading, massage, or expression, if it fail to do so otherwise.—Dr. Watken, *Jour. Am. Med. Assoc.*

The Origin of Scarlet Fever.—There is good reason to believe that we may be on the brink of making one of the most startling discoveries ever chronicled in the history of medicine, that, namely, of the source and origin of scarlet fever, a disease that is accountable for one out of every thirty deaths that occur in the United Kingdom. It has long been familiar to those engaged in sanitary investigations that many epidemics of scarlet fever have followed a particular milk supply; but in most of these instances the disease has first appeared among persons concerned in the work of collection or of distribution, and it was therefore assumed that its subsequent extension to consumers was a result of its infectiousness, and was brought about through the ordinary channels of human intercourse. When the boy who carried the milk had himself scarcely finished peeling after the malady, it seemed superfluous to look beyond him for the means of its communication to others. Last December, however, outbreaks occurred in South Marylebone, in St. Pancras, in Hampstead, and at Hendon, which were evidently related to a common source of milk supply, but in which it was impossible to trace any source of human infection. The dairy from which the milk was derived was shown to be in excellent sanitary condition, and the medical man

who attended the persons employed there was able distinctly to negative the idea that there had been a case of scarlet fever, even in the vicinity, for a long period. At this point, however, the inquiry was entrusted to Mr. Power, one of the most accomplished medical officers of the Local Government Board, who, by dint of the most painstaking and careful observation, at length ascertained that certain of the cows yielding the suspicious milk had been suffering from an eruptive disease of the udders and of contiguous hairy parts, which was capable of communication to other, unaffected animals. That these unsound cows were probably to blame for the outbreak was subsequently rendered certain, from the fact that on a certain day the milk supplied by them was returned to the dairy, condemned for destruction, but being surreptitiously obtained by some poor people living near the farm, its use by the families of the latter was followed by an outbreak of scarlet fever among the children.

Next, two of the affected cows were purchased and sent to the Brown institution, where Dr. Klein commenced a series of experimental investigations into the nature and infective properties of the eruption, the result of which showed that this was not only communicable by contagion, but that it could be transmitted to calves by inoculation also. Further, by the modern method of cultivation the virus could be reproduced *ad infinitum*, milk being by far the most favourable culture medium ; and the curious discovery was made that the disease induced by direct contagion was of a much milder form than when it followed inoculation with the cultivated fluid. Pathologically, the effects produced were essentially those of scarlet fever, the kidneys especially yielding proof in this connection, and of a kind that places the relation of cause and specific effect practically beyond all question.

So far, of course, the absolute indentity of the disease cannot be certified ; but it is, at least, highly probable that, the attention of the profession being fairly aroused to the matter by publication of the work already done, further evidence in point will rapidly accumulate ; and there opens up before us, in consequence, the alluring prospect of a speedy conquest over one of the most fatal diseases which afflict modern society. For the moment astonishment will naturally surpass all other feeling, as we contemplate the principal truth presented to us, viz., that milk is the invariable vehicle of scarlatina, and that the source of the germs producing it is to be found in a seemingly trivial skin disease affecting milch cows ; but when once the truth, if such it be, is fairly realized, the sense of gratitude for such an epoch-making discovery, and for the obviously simple means of prevention it will permit of, must overpower every other sentiment. Nor is the time an inopportune one for publishing the observations already made. For a long period suspicion has deservedly attached to milk as a vehicle of infection ; and only last year strong arguments were advanced for the belief that milk from a diseased cow had originated diphtheria in those who partook of it. Indeed, in many ways the medical world has been prepared for the reception of some such theory as that now advanced ; and it is by no means improbable that from theory it will merge into proven truth.—*Hospital Gazette.*

GONORRHŒAL RHEUMATISM. — Loeb is of opinion that gonorrhœa is only complicated by rheumatism in those cases in which the gonorrhœal process has attacked the hinder portions of the urethra, and in favour of this view he adduces the two facts, first, that the rheumatic symptoms never occur in the early stages of the gonorrhœa, and, secondly, that in the great majority of cases the rheumatism is never seen at all during the first attack, but only after subsequent attacks, when the posterior parts of the urethra are almost certain to be involved. As to the disputed point whether the rheumatism is to be considered as a disease *sui generis*, or as merely an ordinary rheumatic inflammation of the joints, predisposed by the gonorrhœal infection, he comes to the conclusion that *polyarthritis rheumatica* and gonorrhœal rheumatism are two perfectly distinct diseases, and he bases his conclusions on the following grounds :—(1) The difference in the relation of the fever to the local changes in the two diseases; in ordinary rheumatism the fever and the joint affection generally running hand in hand, whereas in gonorrhœal rheumatism the fever is always slight and in most cases is almost, if not entirely, absent. (2) The difference in duration of the two processes, the gonorrhœal rheumatism running a much longer course. (3) Gonorrhœal rheumatism is much less erratic in its character than ordinary rheumatism. (4) The frequent association of gonorrhœal rheumatism with inflammation in the eyes, this inflammation, according to him, occurring sometimes without contagion, and being simply another local expression of the gonorrhœal infection. (5) The less frequent implication of the heart in gonorrhœal rheumatism. (6) The greater tendency to inflammation of the sheaths of tendons and synovial sacs generally in gonorrhœal rheumatism. (7) And lastly, the difference in behaviour of the two processes towards the salicylates. Loeb thus considers the gonorrhœal rheumatism as an infectious process, the seat of infection being the hinder parts of the urethra ; and this view receives apparent support from the recent discovery of a specific organism in the gonorrhœal secretion, the gonococcus. Some doubt, however, still exists as to the specific character of this organism, and hence Loeb is more inclined to think that the cause of the infection will be found in non-specific organisms, examples of whose action in producing

inflammation in joints we have, according to him, in the rheumatic affections of the joints which sometimes occur during the puerperium, also along with bronchiectasis, scarlet fever, and dysentery. As to the treatment, it is especially important as quickly as possible to cure the inflammation in the urethra, and especially of the hinder parts.—(*D. Arch. f. klin. Med.*

Puerperal Fever.—In the Vienna school puerperal fever is known as septic infection, depending (1) upon the local lesion; (2) the infection of these local lesions. Then follow: (1) high fever and inflammation of the genitalia; (2) peritonitis, or pyæmia. There are three varieties recognized.

First. Puerperal peritonitis, or puerperal endometritis, with a symptomatology of fever, unclean lochia, meteorismus, vomitus, and peritonitis. Post-mortem section shows endometritis consecutiva, salpingitis and peritonitis purulenta, with exudations.

Second. Puerperal metro-phlebitis or pyæmia without peritonitis, the septic virus passing through the placental sections to the uterine veins. As symptoms we have: High fever, chills, torpor, subinvolution of the uterus. The abdomen is flaccid and painless on percussion. There may be icterus and metastatic phlegmon.

Third. Peritonitis plus pyæmia, or lymphangitis uteri, or phlegmona pelvis septica.

The treatment is local when a woman begins to have fever on the second day post partum. The external genitals and vagina are washed with ½ per cent carbolized water, or with a 1-5000 sublimate solution. When operations have taken place, and the lochia are pathological, and there is high fever, the uterus is irrigated, a glass tube being used; ⅝ grms. of iodoform, are placed in the uterus. The formula used is: R. Iod. pulv., 18 parts; Amyl. puræ; Glycerinæ; Gum arabic, aa, 2 parts.

Ice applications to the abdomen are used in peritonitis incipiens. Ergot is used internally. The antipyretics used are quinine, ½ grms. daily; sod. salicyl., ¾ grms. daily; antipyrin, ½ grms. daily. If these do not avail, the cold bath is resorted to. Alcohol is used freely in pyæmia, but never in peritonitis. In incipient peritonitis the following treatment obtains: Ice pills; ice cataplasms on abdomen; opium by the rectum, and quinine by rectum. In puerperal ulcers local applications of iodoform, or of iodol (which is expensive but devoid of odor), are resorted to. Salicylic amylum (1 part of salicylic acid to 5 parts of amylum), has also its merits. It has been found that the cases of puerperal metro-phlebitis, although attended with metastatic transference of the poison, forming abscesses and involving the lungs themselves, tend, in a large percentage of cases, to recovery; while those cases of puerperal peritonitis almost always end fatally. Women seemingly moribund, in whom the whole system is poisoned, begin to recover as soon as elaborate metastatic action obtains. These patients are given alcohol very freely.—*Jour. Amer. Med. Ass.*

Port Wine Mark.—(Nævus Vinosus)—Our only method of treating the port wine stain is by means of external irritants. When it exists on parts of the body not exposed to view, it is better to leave it alone altogether. On the face it is so unsightly that an effort should be made to cure it. Unfortunately it cannot be said that our efforts are very likely to be successful. At one time I was inclined to give up the attempt, after trying multiple puncture, simple and with the cautery, Squire's multiple knife, and many other things. But as they so rarely disappear of themselves, and as I have latterly with persistence obtained somewhat better results, I believe we ought at least to give treatment a fair trial. It will require much patience, however, on the part both of patient and surgeon. Much time and care must be expended on them. The difficulty is to bring about a cure without destroying also the skin in which they reside, and so leaving a mark at least as disfiguring as the nævus itself. So far as I can see, our only chance is to bring about a dermatitis severe enough to lead to obliteration of the vessels, but not to produce ulceration. One attack of dermatitis, moreover, is rarely successful, unless the nævus be very small and pale. We have to repeat it over and over again through a period of many months; but looking to the effects of long continued frictional irritation, I have been encouraged to persevere, and, in some cases, have met with success. I have tried brushing with strong nitric acid, repeated blistering, iodine, perchloride of iron, and strong mercurial inunction. On the whole, I should say that iodine made the best application. The liniment, or the Edinburgh tincture, should be used and carried to strong irritation, to be repeated again and again as the cuticle peels off. The objection is the discoloration, so long continued and so conspicuous; but it is least likely to leave a permanent mark from its own action, and is at least as effectual as any other irritant.—*Ed. Med. Jour.*

Morbid Germs in Water.—The close connection which often exists between drinking-water and the contagion of various diseases is unfortunately too well known to call for fresh announcement. A multitude of plans for purifying household water prove its general recognition. In all these the directing principle aims at the exclusion of organic matter, the source of chemical changes which nourish the omnipresent elements of infection. With regard to morbific germs themselves, it is more than doubtful if any system of filtration

can directly destroy or exclude them. It is true that they may be killed by oxygenation, but the power or duration of this process in domestic filtration can seldom, if ever, be relied upon for the purpose. Yet filters form an effectual check to disease, the germs of which are conveyed by water. The object still chiefly to be aimed at is therefore to starve out these injurious atoms by removing their organic pabulum. In reasoning thus, however, we imply that disease germs will only develop in water containing organic material, and not in that which is free from it; nor are we without experimental evidence in support of this view. Among investigations into this subject the most recent is that carried out by Messrs. Crooks, Tidy, and Odling on various London waters. Small quantities of culture fluid containing bacillus anthracis were introduced into household waters of different mineral composition, but free alike from organic impurity. In each case the germ remained active for a short time until probably its food-supply was used up, and the water was infective when added to a sterilised culture medium. After a few hours it lost this property. Thus it appears to be proved that bacillus anthracis, at all events, does not flourish in pure water, and we may probably regard it as being in this respect a test example of the behaviour of other morbid germs. These facts are encouraging since they show that a wholesome water-supply is possible even for the poorest, filter or none, if that in the mains is good and the domestic cistern is uncontaminated by dust or sewer air.—*Lancet.*

TUBERCULOUS MILK.—A series of researches and experiments in testing milk and its infectious qualities in the case of tuberculous cows has been published in a Scandinavian journal by Drs. Bang and V. Storch. Dr. Bang found that milk both from the tuberculous portion of the udder and the healthy portion contains bacilli, and always produces tuberculosis in rabbits inoculated with it; also that milk from tuberculous cows without diseased udders was not infectious in some cases, but in others it contained bacilli and produced tuberculosis by inoculation. On further investigation it was found that all the animals thus experimented on developed typical artificial tuberculosis. Milk containing bacilli was then put into a centrifugal cream-producing apparatus, and when the vessel was made to revolve most of the bacilli collected in the film adhering to the periphery of the vessel; but the cream itself contained a certain number, and produced tuberculosis by inoculation. Again, the cream, after exposure in a dish for some time, was found to contain bacilli, the acidity having no destructive influence on them. Butter made from such cream was infectious. Heating to a temperature of 60°C. was found to lessen to a great extent the noxious properties; heating to 70°C. in many cases destroyed infection, but not in all. Dr Storch, in his chemical examination of milk from tuberculous udders, found that that from the diseased portion of the gland had a strong alkaline reaction; at the commencement of the disease it resembled healthy milk in appearance, but in the later stages it was thin, watery, and yellowish brown; the milk from the healthy portion, on the other hand, was thick and of creamy consistence. In milk from the diseased part an increase of water and albumen was found, whilst there was a decrease of milk, sugar, and fat. From the healthy portion of the same gland the milk was found to be more concentrated, the albumen and water being diminished, whilst the fat, milk and sugar were increased. The ash obtained from the milk in the sound portion was not abnormal, but in that from the milk in the diseased part a great decrease of calcareous matter was observed and an increase of soda. Dr. Storch endeavours to explain these phenomena by suggesting that probably milk sugar, and fat are formed in the udder, and albumen and water in the cells of the gland.

WATER AS A DIURETIC.—Dr. Brunton says, in the *Practitioner*, that water is, perhaps the most powerful diuretic we possess, although fewer experiments have been made with it upon animals than with the others. The diuretic action of water drunk by a healthy man is very marked, and it appears impossible to explain its elimination by a mere increase in blood pressure, whether general or local. It has the power of increasing tissue-change, and thus multiplying the products of tissue-waste which result from it, but it removes these waste products as fast as they are formed, and thus, by giving rise to increased appetite, provides fresh nutriment for the tissues and thus acts as a true tonic. In persons who are accustomed to take to little water, the products of tissue-waste may be formed faster than they are removed, and thus accumulating may give rise to disease. Many gouty persons are accustomed to take little or no water, except in the form of a small cup of tea or coffee daily, besides what they get in the form of wine or beer. A large tumbler of water drunk every morning, and especially with the addition of some nitrate or carbonate of potassium, will prevent a gouty paroxysm. Still more numerous, possibly, in the class of people who arise in the morning feeling weak and languid. Many such people are well fed, they sleep soundly, and it seems almost impossible to believe that the fatigue which they feel in the morning can result from imperfect nutrition, more especially as one finds that after moving about, the languor appears in a great measure to pass of. It seems that this languor must depend upon imperfect removal of the waste products from the body, as we know that the secretion of urine in healthy persons is

generally much less during the night than during the day. Such people should drink a tumbler of water before going to bed in order to aid the secretion of urine and of the waste products during the night.

THE TREATMENT OF DISORDERS OF THE STOMACH.—1. *Dyspepsia*—Causes of Functional Indigestion: (1) Eating too rapidly; (2) drinking too much water at meal-time; (3) improper food; (4) want of exercise; (5) too much tea and coffee; (6) too much tobacco. Treatment: Underdone meats and but little bread. No sweets. Pepsin sacch., gr. v., at each meal. The mineral acids before meals, as muriatic, nitro-muriatic, or phosphoric. Certain bitters, as nux vomica and strychnine combined with gentian or calumba. An alkali a few hours after meals when there is a great acidity, but should not be used too frequently. (2) *Dilatation of the Stomach.*—Treatment: Dry, solid food; underdone meats; no milk. Carbolic acid to allay fermentation. Wash out stomach occasionally. Strychnia, hypodermatically or by mouth. 3. *Chronic Gastritis.*—Treatment: Cause to be removed. A scanty supply of food. Pepsin at each meal (gr. v.). Milk, with a little meat, may be taken as food. Oxide of silver, gr. $\frac{1}{2}$, a dose, will be found of value. Bismuth is useful. Avoid tonics, but use the mineral waters to keep portal system drained. (4) *Gastric Pain* (*Gastralgia*).—Treatment: Diet of little importance; stimulus at meals in small amounts. Morphia relieves at once, but use it carefully. (1) Bismuth, with a little opium; (2) nitro muriatic acid, gtt. ij.-iij., diluted; or, (3) Morph. sulph., gr. 1-32; acid carbolici. gtt. j.; aq. menth. pip. ad. f ʒ j., ter die: (4) Fowler's solution, beginning with gtt. j. and increase to gtt. v., ter die.—*Coll. and Clin. Record.*

BIRTH DURING HYPNOSIS.—Dr. Edward Pritzl records, in the *Wiener Med. Wochenshrift*, a case of this kind. A young woman was under his care in a lying-in hospital who, he had reason to believe would be easily brought into a hypnotic condition; and some preliminary trials showed his surmise to be correct. When, therefore, the case untimately proved to be one in which narcotics should in the usual course be employed, Dr. Pritzl determined to give hypnosis a trial. In spite of her pain and the nervous excitement produced by the presence of several medical men, who wished to witness the experiment, the woman, after looking but a few seconds at the brilliantly illuminated thermometer bulb that was passed before her eyes, sank back unconsicious. The following observations were made: The intervals between the pains lasted nearly two minutes; the pains themselves were more voilent than is usual under a narcotic, and lasted on an average fifty seconds, being at their heighth actively aided by the pressure of the abdominal muscles, and the intensity of the latter was quite normal. The patient was perfectly insensible, but the left lower arm was cramped and the left leg became stiff. There was no change observable in the right side. She turned her head hither and thither as if she were angry, frowned and groaned. In the intervals she resembled one asleep. In forty-five minutes from the time she became unconscious, a healthy child was born. In forty-five minutes after this, the woman was roused from her sleep, and would not believe she had been delivered, being hardly willing to own the child. The case up to the time of writing, had taken a favourable course. Dr. Pritzl lays stress on the following points as remarkable: 1. It was easy to induce hypnosis in such a case of labour. 2. The pains were violent enough to arouse reflex action of the abdominal muscles, but not to rouse the patient. 3. Evidently the hypnotic state accelerated labour, for it had been expected to last several hours. 4. The after-birth stage, which lasted forty-five minutes, was remarkable for the character of the pains, which, though short, were intense and assisted by abdominal action. The loss of blood was slight. Dr. Pritzl has similarly experimented in two other cases, which, though successful, were neither so rapid nor so perfect.

MERCURIAL INTRA-UTERINE INJECTIONS.—In proof of the advisability of greater caution than some may think necessary in the use of the mercurial antiseptic intra-uterine injections, so largely employed by some obstetricians, I may hear cite from the *American Journal of Obstetrics* the history, not long since reported by Dr. Partridge, of New York, of "a case of labour that had occurred at the Nursery and Child's Hospital, in which vaginal injections of bichloride of mercury, 1 to 2,000, were used, and the patient did well for three days. On the third day she had a chill, and the house surgeon gave an intra-uterine injection of the same solution. The next day there was another chill, and the injection was repeated. This was followed by bloody passages from the bowels, and death took place. Intense colitis was found *post mortem*. Dr. Partridge referred to reports of three other cases of supposed mercurial poisoning from the same cause. The patient whose case he had related died within sixty hours from the administration of the first intra uterine douche." At the same meeting of the New York Obstetrical Society at which the last case was referred to, Dr. Partridge also related a case in which, by mistake, a nurse threw a bichloride injection into the bladder instead of into the vagina, and severe cystitis was set up—quite as much, perhaps, from mechanical violence as from any special action of the bichloride.—*Dub. Journal Med. Science.*

MICROCOCCUS IN BRONCHO-PNEUMONIA.—Some

researches on the micro-organisms of lobular pneumonia have been made by M. Pipping at the suggestion of Friedlander. In seven cases of fourteen examined, a micrococcus has been detected in variable numbers, having a great resemblance to the pneumococcus. The majority of the organisms were grouped in pairs or in chains. In three cases the oval cocci were surrounded by a very distinct capsule. Many of these capsules contained two or more cocci. These cases were uncomplicated by any acute disease. One was associated with carcinoma of the pylorus; the second with multiple cold abscesses of the hips; and the third with arterio-sclerosis and senile atrophy. The author gives a detailed description of the histology and of the experimental cultivations and inoculations with the pneumonic products of the said three cases. The preliminary inoculations in mice, rabbits, and guinea-pigs have yielded results that are in harmony with those obtained by Friedlander in the case of the coccus of lobar pneumonia. In four other cases of pneumonia of recent date M. Pipping discovered cocci having some resemblance to the pneumococcus, but differing in the absence of a capsule. Attempts at cultivation proved futile in two cases, and in the other two led to the development of several species of bacteria, but of none with a capsule. Seven cases yielded negative results. The author concludes that the encapsuled coccus regarded as special to lobar pneumonia is equally the pathogenic agent of some varieties of broucho-pneumenia.—*Lancet.*

SALICYLIC ACID TREATMENT OF DIABETES.—Dr. J. S. Holden reports in the *British Medical Journal*, May 1, six cases of successful treatment of glycosuria with salicylic acid, as confirming the views of Prof. Latham as to the pathological connection between diabetes mellitus and rheumatism.

The latter holds that there are two distinct kinds of diabetes: First, that which arises from a neurotic disturbance of the function of the liver; second, that which arises from a neurotic disturbance of the function of the muscle. The latter he has found to be so intimately associated with rheumatism that the degree of oxidation determines whether an excess of lactic acid or of glucose shall be formed in the muscles. He has also found that salicylic acid has the power of arresting the formation of both these products.

Dr. Holden has found the salicylic acid treatment to be of no avail in the treatment of non-rheumatic diabetics.

The first and most marked effect of the salicylic treatment in glycosuria of rheumatic persons, is the almost complete removal of the distressing polyuria.

The careful restriction of diet is less essential in this than in the other form of diabetes, though it is an aid in these cases too.

Dr. Holden has found the following formula a serviceable one for the administration of salicylic acid:

℞ Acidi salicylici, ... ʒij.
Sodæ bicarbonatis, ... ʒj.
Ammoniæ carb., ... ʒj.

Mix in one ounce of water, and when effervescence has ceased add water to twelve ounces.

An eighth or twelfth part to be taken three times a day. This, he says, is not unpalatable when given in a wineglassful of water with a little tincture of orange added. The ammonia prevents any depressing effects.

As a means of distinguishing between the two forms of glycosuria, aside from the presence or absence of rheumatic arthritis, etc., which is generally sufficient, Dr. Latham has observed that in the diabetes of rheumatics there is present in the urine some substance which dissolves cuprous oxide, so that a larger quantity of Fehling's test has to be added before getting the brown precipitate in this urine than in the diabetic urine of hepatic origin.

BICHLORIDE OF MERCURY FOR CONSUMPTION.—We have for some time been using corrosive sublimate with such marked advantage in the treatment of tuberculosis of the lungs in a manner so much like that spoken of in the subjoined extract from July number, 1886, of *Progress*, that we had intended before this to make note of the fact. *Progress* does not tell us to whom to credit the following striking illustration of its value in tubercu losis: "S. T. M., aged 38 years, came October 23, 1885, in a very feeble and emaciated condition suffering from severe dyspnœa, hoarseness, frequent chills followed by high fever, and colliquative sweats. Examination showed extensive infiltration of the epiglottis and the walls of the larynx. The vocal cords were concealed behind the swollen tissues above. The cough and expectoration seldom ceased more than five minutes at a time during the entire day. The sputum was so rich in tubercle bacilli, that mounted preparations of it were used as samples for illustration in teaching. This man got a spray of the bichloride of mercury, prepared as follows:

℞. Hydr. bi-chloridi . . . . gr. ij
Aquæ destillatæ . . . . O. j
Sodii chloridi . . . . . ʒj
M. Ft. solution.

He was ordered pills of the bichloride gr. $\frac{1}{4}$ each, one before each meal and at night, and a pill composed of assafœtida gr, iij, and ext. nux vomica gr. $\frac{1}{4}$, to be taken at the same time. In six weeks he was walking the fields five or six miles daily hunting game. He was married last January, and is now out West."—*Virginia Med. Monthly.*

HYDRASTIS CANADENSIS IN THE TREATMENT OF UTERINE HEMORRHAGE.—M. A. Mendes de Leon, of Amsterdam *(Arch. f. Gyuak)* reports his experience in the treatment of about forty women with hydrastis canadensis. The remedy seems to have afforded the best results in cases of menorrhagia accompanied with severe dysmenhorrhœa as a consequence of a determination of blood to the generative organs; in catarrhal inflammation of the body and neck of the uterus; in chronic pelvic cellulitis with severe abdomonial pains at the periods; in prolonged and painful menstruation connected with displacements, especially retroflection and retroversion; and in hemorrhage at the menopause. Instances are given of each of these five sorts of cases. In almost all of them the drug diminished the bleeding, and generally it overcame unnatural frequency of menstruation. The author observed no untoward effects beyond slight digestive derangements, except in two cases; on the other hand the appetite was improved. In the two exceptional cases, nervous symptoms made their appearance, the pulse became very weak and frequent, the patients were depressed and had hallucinations, and one of them suffered with transitory delirium and loss of consciousness. The drug was usually given for fourteen days before a menstrual period, in doses of from fifteen to twenty drops (preparation not specified) four times a day; in a few cases it was given during the whole intermenstrual period. Like Schatz, the author attributes the efficacy of hydrastis not so much to any action of the muscular tissue of the uterus as to its exciting vascular contraction and consequent diminution of pelvic congestion.

NOTES ON THE TREATMENT OF SUN STROKE ACCORDING TO PROFESSOR DA COSTA.—For *heat exhaustion*, removal to a cool place, stimulation and forced feeding. For sunstroke proper, or *thermic fever*, reduce the temperature by stripping patient and dousing with cold water, or rub down with ice. A new method, introduced into practice simultaneously by some New York doctors and by Dr. Orville Horwitz of this city, is the use of antipyrine, either hypodermically, per rectum, or by the mouth. This plan has given excellent results. Turpentine by the bowels, at times, is useful. When the face is flushed, pulse full, put a drop or two of croton oil on the tongue. The use of the lancet is not advised, but exceptionally, when the case simulates apoplexy, it may be called for. Dry cups to the back of the neck in these cases do good. See that the kidneys keep acting; keep the system full of liquids; give water by the rectum. For convulsive phenomena, asafœtida by the bowel, inhalations of chloroform with care, and chloral hypodermically, all do good; but the most certain is morphia, thrown under the skin.

When the acute symptoms are over, a long treatment is necessary. If the patient has means he should remove to a cool climate, at least during the summer, and do no work of any nature for a year. Care must be taken about the function of the bladder, as irritability of that organ remains, also severe headache. Both of these troubles are best relieved by potassium bromide and cannabis indica.—*Col. & Clin. Record.*

INFANTILE DIARRHŒA.—In Dujardin-Beaumetz's Diseases of the Stomach and Intestines, an English translation of which, by Dr. E. P. Hurd, has just been issued, the following suggestions of Parrot as to the treatment of infantile diarrhœa, enterocolitis, and cholera infantum, are highly commended:

℞ Subnitrate of bismuth . . 2 parts.
Syrup of blackberry . . 100 parts.—M.

Dose: A teaspoonful every third hour before nursing or taking food.

If the stools are of a green color, and have the cut spinach appearance characteristic of enterocolitis, the following formula is preferred to the above, viz.:

℞ Subnitrate of Bismuth . . 3 parts.
Lime water . . . . . .
Syrup of blackberry . . aa 50 parts—M.

Sig. Dose, a teaspoonful every third hour before nursing or taking food.

In acute athrepsia and threatened collapse, Parrot administers, alternately, every ten minutes, a teaspoonful of the following mixtures, both of which are to be iced before administered:

1. Old brandy . . . . . 1 part.
Water . . . . . 20 parts.
2 A nutrient broth made of lean beef.

Twice or thrice a day the infant should be immersed for five minutes at a time in a warm bath, at about the blood heat. In this water a little bag of mustard flour may be allowed to soak. Two ounces of mustard are sufficient for six gallons of water.—*Medical Age.*

PAINLESS EXTRACTION OF TEETH WITH THE AID OF COCAINE.—Bignon records several cases in which teeth were extracted without pain by the subgingival injection of a twenty per cent. solution of cocaine benzoate. The method as at present practised, seems somewhat complicated, but is probably capable of simplification. A preliminary injection of two or three drops of the solution named is made in the internal portion of the gum of the carious tooth. After waiting forty seconds to one minute, a second injection of the same amount is made at the same point, but somewhat deeper. After a second delay of one minute the tooth is removed. The second injection is not felt.

It is interesting to note that no unpleasant results have been observed from this method, although the equivalent of three-quarters of a grain of the alkaloid was used.—*Les Nouveaux Remedes.*

TREATMENT OF THE BITES OF RABID DOGS.—The chief surgeon to the Metropolitan police, Mr. Mackellar, has issued a circular to the divisional surgeons advising that in cases of bites of dogs reported to be rabid the following treatment should be adopted :—" When possible a ligature to be applied above the part bitten ; prompt and thorough suction of the wound, freely washing with water, and the application of absolute phenol (pure carbolic acid). The individual sucking the wound (usually the patient himself) to spit out all the matter so sucked, and to freely wash out the mouth with water. Should the wound be a punctured wound, make a crucial incision, promote and encourage bleeding, and treat as above." The circular adds that the use of nitrate of silver is to be condemned as insufficient, and that the phenol is painful only for a few minutes.

LANOLIN.—1. Lanolin is more readily absorbed by the skin than any other fatty substance.

2. As a basis for ointments it is useful when an effect upon the deeper skin or upon the whole system is desired.

3. On account of its firm-consistency, it is advisable to mix with it a certain amount of lard, especially in cold weather.

4. When applied to a highly inflamed skin, lanolin may not prove as bland as *fresh* lard or *pure* vaseline.

5. Considering its recent introduction, its questionable superiority, and its present cost, it cannot be recommended as yet as the best basis for all ointments.—*Jour Cut. and Ven. Dis.*,

SPARTEINE AT HOME.—Dr. Thomas H. Buckler writes as follows to the *Boston Medical and Surgical Journal:*

"The expensive sparteine lately recommended by Germain Sée for cardiac weakness, is prepared from Scotch broom — spartium scoparium — the *Planta Genista* or emblem of the Plantaganets, which grows in many parts of the thirteen original States on sterile soil. It was brought over here by the Scotch and English to prevent the washing of gravelly roads and gutters. It should be cut and gathered at this season, and dried like hay. Its active principle is extremely soluble in water, and two ounces of ground or contused stems to a quart of boiling water, a wineglassful for a dose, every eight hours, are equivalent to a grain and a half of the prepared gum used by Dr. Sée. This remedy is useful not only in failure of the cardiac ganglia, but as a tonic to the organic and vasometer nerves in whatever part of the body congestions occur from loss of power in them. I have used this agent in the form of infusion for half a century, and with marked advantages in many cases."

ACONITE IN THE FEVERS OF CHILDHOOD.—Dr. W. Barrett Roué *(Provincial Medical Journal)* complains that English physicians make too little use of aconite in the febrile affections of childhood, and urges its more general employment. He gives it in small and frequently repeated doses (one-fourth to one-half-minim of the tincture every three or four hours for children three or four years old), combining it with tincture of belladonna (one to two minims) to prevent depression. As soon as the child perspires freely, the medicine has done its work and should be stopped, to be again employed if there be a further rise of temperature. In cases of more than usual prostration he combines the aconite with carbonate of ammonia, and accompanies the mixture with brandy. The aconite, he says, will act equally well in such a combination, and there is nothing unscientific in so prescribing it.

WHEN NOT TO GIVE CHLOROFORM IN PARTURITION.—1. Never give it to a woman who has a tendency to flood during every confinement, or to those who have great relaxation of fibre, or to weak, anæmic women in their eighth or tenth confinement, except for necessity.

2. Do not give it where labor is complicated with severe vomiting, or with acute heart or lung troubles, unless there be an imperative demand for it.

3. It should not be given to complete anæsthesia except for operations, convulsions, or spasms of the cervix, and then one person should devote his entire attention to it.

4. The inhalation should be stopped directly the pulse becomes weak or the respiration irregular.

5. Do not give it if there be grounds to fear a fatty or enfeebled cardiac wall.

In all cases where it has been given, there should be extra care to prevent post-partum hemorrhage. —*Weekly Med. Review.*

STRANGURY is relieved by chloral hydrate more quickly and certainly than by any other remedy whatsoever. The dose must be a full one, however, in order that the effects be rapid and complete. For adults it should not be less than twenty-five to thirty grains, repeated if necessary. Of course it should not be given unless it is certain that the suppression is not due to some impassable mechanical obstruction.—*St. Louis. Med and Surg. Jour.*

SODIUM salicylate should be protected from light and moisture, it will become inactive in a few weeks.

THE CANADA LANCET.

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ANTISEPTICS IN MIDWIFERY.

Within the memory of many physicians, antiseptics have advanced from an insignificant to an important position in materia medica. The germ theory of disease naturally evolved the germicide. The universal *microbe*, having been charged with rendering many physiological conditions pathological, by its presence, it followed that, what would destroy bacteria must necessarily be indicated, Hence the prominence of the so-called antiseptics. The germ theory is only on trial at present, and may be superseded by some more probable cause of disease in the future, as science advances; like many of the doctrines of the learned of former days, e. g. the humorists, the chemists, the vitalists, etc. Should it be found that microbes are but results, and not causes of pathological action, then antiseptics must necessarily become less important. But up to the present, the great preponderance of evidence is strongly in favor of this theory becoming firmly established, and of antiseptics not only retaining their present importance, but of ultimately attaining a chief position, and becoming our most trenchant weapon in combating disease. It is important, therefore, that we avail ourselves of their potency, in destroying or rendering innocuous, what we have strong evidence for believing to be the *materies morbi*. That we are in some danger of ascribing virtues to antiseptics which they do not possess, is probable, yet, as the science of medicine is only established by experiment, it is our duty to give them a fair trial and hope for the survival of the fittest. But it is important also, for their ultimate success, that we do not ask them to exceed their legitimate powers, and thus bring them into disrepute by excessive devotion, as has been done in the case of many other valuable remedial agents, such as mercury, phlebotomy, etc.

It is but recently that antiseptics have been generally used in midwifery, and we fear that even now, their utility is not very generally recognized and acknowledged. With the older physicians who have had success in this branch of their profession, prior to the reign of antiseptics, the use of antiseptics is thought to be a work of supererogation, if not positively injurious. It must be admitted, that frequent injection of antiseptic liquids into the vagina and possibly uterus, even by experienced hands, is not free from dangerous results. Many instances of metritis, peritonitis, etc., have been recorded, which were caused by this means. Dr. H. Fry, of Washington, reports many minor accidents, and one case of acute general peritonitis from this cause. Dr. Chamberlain has twice observed peritonitis to quickly follow injections of warm water. Dr. F. P. Foster believes injections dangerous. Dr. Munde, and many others hold that vaginal injections may produce pain, inflammation, and other dangerous symptoms. Doubtless, as this practice becomes more prevalent, many more similar results will be recorded. In hospitals and maternities, where noxious microbes are supposed to prevail, this mode may be necessary; but in private practice, with healthy surroundings, the general use of post-partum antiseptic injections does not seem to be so clearly indicated, especially when their administration must be entrusted to inexperienced and often careless hands. When the lochia, from any cause, have degenerated and taken on a putrescent odor, this lesser risk must be overlooked, and injections frequently administered, in order that the greater danger may be obviated. But with good hygienic environment, and no indication of septic degeneration, many good authorities recommend that post partum antiseptic treatment should be limited to external application.

It has been pretty well established, that by this means, the usual post partum rise in temperature, after the first day, can be greatly diminished, if not entirely prevented. What we have been ac-

customed to call milk fever, is now held by many to be caused by the absorption of waste material, from the involution of the uterus; and "that the difference of the so-called milk fever, and serious septic fever, is only one of degree, and not of kind." Barnes says, that if milk fever persists beyond twenty-four hours, it becomes puerperal fever. The excretory organs, so active at this period, are fully capable of removing the absorbed matters, so long as they remain natural; but when infected with noxious bacteria, from external sources, these organs are incompetent to remove the more septic debris with sufficient rapidity, and puerperal fever is the result.

It has been found, even in hospitals, when antiseptic delivery and subsequent treatment has been thoroughly adopted and enforced, that the so-called milk fever no longer obtains, and the reasonable hope is entertained that deaths from puerperal fever will be greatly diminished, if not altogether abolished. This would reduce the mortality of child-bed, says Dr. John Williams, to one-fourth per cent. All agree in the safety and utility of proper disinfection of the hands and instruments of the accoucheur, and of thorough antiseptic cleanliness externally, on all occasions.

A solution of mercuric bichloride, 1 to 1000, is recommended as the best antiseptic for the accoucheur, and external application, and 1 to 4000 for injections, when necessary. The latter should be used as hot as can be borne. The syringe used should not have a terminal opening. Firm pressure must be applied to the uterus during the injection, to squeeze out blood-clots and other matter, and prevent the liquid from entering the uterine cavity. With these and other precautions which suggest themselves to the accoucheur, let us hope that the use of antiseptics in the lying-in room and ward may become more general, and that further trial may establish the sanguine views entertained by the many, who so ardently advocate their utility. But let none forget, that neither science nor art can successfully substitute anything in lieu of nature's antiseptics, viz., pure air, water, and sunshine.

THE RECENT BRITISH MEDICAL ACT.

The question as to the right of our Medical Council in Ontario to insist on all practitioners fulfilling the conditions of its curriculum has at length been set at rest, Our readers are all awar that for years past the profession in Ontario ha been working for the consummation of this event It has been held that in this, as in other matter of education, we should be outside Imperial con trol; and now, by the Queen's assent to the Brit ish Medical Act of 1886, given just at the close o the last Parliament, our right to perfect indepen dence has been recognized. Our Council is actin wisely we think, in not enforcing the condition until after June 1st, 1887. This will give som gentlemen who have begun their studies on th old lines, an opportunity to obtain their Britis qualification and register before that date. Bu it will still press hardly upon students who are i their last year, and who, even though they gradu ate next spring here, can hardly hope to obtain British licence before June 1st. This, according t the present curriculum of our Council, will neces sitate their taking up again *all the primary an final work.*

Would not this be a hardship? We think so and have no doubt that some arrangement will, i the wisdom of our Council, be arrived at, by whic gentlemen will not labor under any disability simply because they commenced their studies on or two years earlier or later.

Some members of the profession, and some e pecially who are members of the Council, seem t hold the idea that graduates who proceeded t England or Scotland and took a licence whic entitled them to register here, were evading ou regulations, or, as it has been put, *evading ou laws.* Now a law must be made before it can b broken, and therefore persons who did not tak the Council examination, had a perfect right t qualify as they chose, notwithstanding the fac that they did not pay for the Council examinations In another column is a letter, in which som very practical hints are thrown out, especiall that one which suggests that only the more im portant subjects of the medical course be require at the final Council examinations. The matte has yet to be decided upon by the Council, and w make this brief notice in the hope that it ma call forth an expression of opinion from the ran and file, as well as from those who are our leaders

DR. W. G. WALFORD says *(Brit. Med. Jour.* that arsenic is prophylactic of scarlatina.

TREATMENT OF CHOREA.

Many drugs have been lauded by various authors for the treatment of this common malady. While the pathology of the affection remains so obscure, it is not to be wondered at, that empiricism reigns in the treatment. Most observers agree that arsenic is more to de depended upon than any other drug. But competent men also say, that sometimes drugs are not so much indicated, as rest and food. Thus, Goodhart makes it his first principle in all cases : and he believes that the marked improvement often noticed when choreic children are admitted to a hospital, depends more upon the rest and quiet there obtained, than upon any new, or more effective medication. Of course the regularity of treatment in a hospital aids in the improvement, but first of all are the rest and quiet. Many mild cases do quite well without drugs, and could the practitioner in private cases quiet the apprehensions of the relatives, doubtless many more cases of cure without the use of medicines would be noted. Arsenic is the most certain medicine known at present for the alleviation of the symptoms. But it must be administered in regular, and constantly increasing doses, or its full benefit will not be apparent. Beginning with three minim doses of Fowler's solution, three times a day, it should be increased one drop at each dose, daily, until the point of tolerance is reached. It would be quite safe to commence with such a dose for a child six years old, and it may be continuously increased up to twelve or fifteen minims each dose, choreic children showing great tolerance of arsenic. Other preparations of arsenic have been recommended, but the majority of writers on the subject agree that the liq. arsenicalis is the most convenient, as well as the most effective preparation in use. Thus Sinkler, having tried the bromide of arsenic, reports that it was not in his hands so efficacious as the Fowler's solution.

Should toxic symptoms supervene, the drug should be stopped for a day or two, and then administered again. Some diversity of opinion exists, as to whether it should be recommenced in the largest dose which had been tolerated, or whether the patient should go back to the original small dose, and work up as before. Seguin adopts the former plan. Not unfrequently the patient seems worse for a few days after the arsenic is administered, but in a short time improvement is noted.

Success has followed the subcutaneous use of Fowler's solution in chronic cases which refused to yield to any other mode of administration of this, or any other agent. The solution for hypodermic use is better prepared without the Spt. Lavand. Co., as it is less liable to be followed by those troublesome abscesses, so common after the use of the hypodermic syringe, especially if the needle be not introduced deeply into the muscle.

In cases which succeed rheumatism, actæa racemosa often does well, though even here, notwithstanding the alleged wonderful influence of actæa over rheumatism, the nerve tonic treatment by arsenic is more reliable. Ringer says he has found no benefit from its use in uncomplicated cases. Among other agents which might be mentioned as beneficial, and as even sometimes proving successful when the arsenic fails, are zinc sulphate, oxide and nitrate of silver, and the various preparations of iron ; also conium, hyoscyamus, and valerian.

Now, there are certain cases in which such treatment would be almost useless, viz.: those in which the motions are so violent as to prevent sleep, or even deglutition. Here we must at first restrict ourselves to the *sedative* plan of treatment, leaving the above *tonic* plan to take its place later on. When a child, through constant loss of sleep, becomes so choreic as to be unable to take nourishment, danger is imminent, and some agent must be exhibited which will give rest and sleep. Such we have in chloroform and chloral. Inhalations of the former often work like a charm, the child sometimes sleeping hours after the effects of the chloroform have passed off, and waking in a calmed and greatly improved condition. The same may be said of the effect of large doses of chloral. The administration may have to be continued for days, gradually decreasing the number of inhalations of chloroform or doses of chloral, and taking especial care that proper food be given during the short intervals between sleep. As soon as the serious symptoms are relieved by this sedative line of treatment, the tonic plan must be introduced. When anæmia co-exists, iron should be combined with the liq. arsenicalis, the ammonio-citrate being a good preparation. Long standing cases require also general tonics, such as cod-liver oil, exercise in the open air, regular gymnastics, and any and

every agent which will assist in bringing the nervous tone up to the normal. Small doses of arsenic and iron should be continued for a long time after the child is apparently well, to ward off a second attack. It must be added, that a few cases resist all treatment. These are chiefly hereditary choreics, and those suffering from localized chorea.

THE DOMINION MEDICAL ASSOCIATION.

The annual meeting of the Dominion Medical Association was held in Quebec, August 18th and 19th. The attendance was not large, the Eastern men not turning out as it was hoped they would do. The meeting was held so far east, partly for the purpose of encouraging the members of the profession in the Maritime Provinces to come to the fore; but the experiment was not a success. The representation from the west was good, as it was also from the cities of Montreal and Winnipeg. The address of the president was a good one, and contained many valuable suggestions, among which may be noted the proposal to memorialize the Dominion Government, for the purpose of obtaining a grant to establish a laboratory for original research. This idea is a capital one, and deserves to be carried out. His proposal to have courses of lectures established, corresponding to the lectures given by eminent men, for the Royal College of Physicians and Surgeons in England, is one which will meet the approval of all.

The question of matriculation was touched upon, and various opinions were elicited. Dr. Sullivan made a very pertinent remark, when he asked what there is to offer to a man for all the years of labor and expense that will be necessary, if the standard is raised. The papers were good and were well received. Dr. McEachren's report on pleuro-pneumonia in cattle was full of interest. He discussed the nature of the disease in a very scientific manner, and suggested "lung fever" as a name more appropriate than pleuro-pneumonia.

The election of officers was made without any soliciting or canvassing, a matter of congratulation to the gentlemen who are to fill the offices for the next year, as well as to the profession at large. Dr. Graham, the new president, will be heartily welcomed by all who know him; no better choice could have been made. His well-known scientific attainments, great zeal for the advancement of scientific medicine, and genial manner, make him well qualified to fill the position satisfactorily. We heartily congratulate him upon the honor bestowed upon him, and the Association on the choice made.

While the profession in Quebec kept aloof, as a body, there were fortunately some exceptions. Drs. Russell and Valleé have the thanks of the visiting brethren, for the pains they took to render their visit pleasant as well as profitable. They will be remembered by the Western men as having shown the greatest kindness and hospitality. The next meeting will be held at Hamilton.

STAFFORDSHIRE KNOT. — The *Albany Medical Annals* gives among its *abstracta*, the following as Lawson-Tait's method of constricting the pedicle: He employs an awl-like needle, with an eye near the point, and threaded with the ligature, to transfix the pedicle at its middle As soon as the eye appears on the distal side, the ligature is seized and pulled upon while the needle is withdrawn, and entirely cleared. Now there is a loop on one side of the transfixed pedicle and two free ends on the other. The next step is to pull upon the loop until it is long enough to pass over the tumor or collapsed ovarian cyst; then one of the free ends is passed through the loop, and the two ends pulled upon till the loop is shortened and made to encircle the halves of the pedicle at the line of transfixion.

TREATMENT OF HYDROCELE.—Dr. Keyes recommends, in the *New York Medical Record*, the injection of pure carbolic acid "deliquesced in a little glycerine" as a simple, effectual, and almost painless method of treating hydrocele even of large size. The instrument he uses is a glass syringe holding about a hundred minims, to which a hypodermic needle of medium size is fitted as a nozzle. The hydrocele- fluid is first drawn off either through this needle or by a separate puncture; thirty to sixty minims of the carbolic acid and glycerine are then injected. Dr. Keyes recommends that the patient should be kept quiet, but not necessarily confined to bed, for forty-eight hours.

PERMANGANATE OF POTASSIUM IN SNAKE BITES. —Dr. J. Berger reports (*St. Louis Med. Jour.*) that his son, æt. 14, recovered without any ill

leasant symptoms, from a bite given by a copper-ead, both fangs having entered the flesh of the high. The remedy used was permanganate of otassium, 10 minims of the solution being inject-d as soon as possible under the wound. Fifteen inutes after, the injection was repeated, and the ain and swelling very soon disappeared. The vriter says the remedy must be used within a few oments after the wound is given, or it is not so ffectual.

Topical use of Viburnum Prunifolium in Threatened Abortion.—Dr. Todd (*Kansas City Med. Rec.*) says he has had marked success from he topical use of this remedy. He applied it on cotton pledget, saturated with a solution of 1 oz. f the fluid extract to 2 oz. of glycerine, pushing t well back against the cervix. This plug is to e worn only at night. He mentions cases in hich he succeeded in carrying the patients to full erm, which he considers would have been hopeless ithout the topical action of the drug.

Sulphate of Iron in Diarrhœa. — Charles othwell, writing to the *Brit. Med. Jour.*, calls ttention to the great value of sulphate of iron in iarrhœa both of adults and children. He says he salt is generally used in the disinfection of xcreta, in sewers, etc. Why not, then, a more eneral use of this agent in the "aboriginal sewer *n corpore villi*," which nature flushes at such vaste of blood-serum? He has found it highly eneficial in choleraic diarrhœa, and thinks it is ot widely enough used.

Anodyne for Vesical Irritation.—Dr. Cope-and recommends the following as an injection for he chronic inflammation of the neck of the blad-er, in old men with enlarged prostates: Ten grains f the benzoate of soda to one ounce of water, to hich is added 20 or 30 drops of the green tinc-ure of gelsemium. This is warmed, and injected nto the bladder when the pain is severe. It should e retained for 20 or 30 minutes, and then either vacuated or drawn off.

Oxalic Acid as an Emmenagogue.—M. V. oulet (*Gaz. hebdom. de méd. et de chir.,*) reports number of cases in which oxalic acid has been sed for amenorrhœa from various causes. He gards its effects as marvellous, including an amelioration of the pain in cases of dysmenorrhœa. He gives it according to the formula:

Oxalic acid,	2 parts.
Warm water,	200 parts.
Syrup of bitter orange-peel,	60 parts.

A teaspoonful is to be taken every hour.

The Blood in Consumption.—Dr. Cutter, of New York, has lately read a paper before the Medico-Legal Society of his city, advocating the microscopical examination of the blood for diagnosis of consumption, with reference to life insurance. While some few may recognize abnormalities in the blood of consumptives, it would be too much to expect the rank and file of medical examiners to decide whether an applicant has or has not the disease from a microscopical examination of the blood.

Chloral as a Vesicant.—Hydrate of chloral has, according to the *London Medical Record*, been successfully employed instead of cantharides for blisters. For this purpose powdered chloral is sprinkled on previously slightly warmed adhesive plaster. Vesicles are raised by it in about ten minutes. The advantages of this blister over other kinds, are rapid and perfectly painless action, and absence of any of the troublesome effects sometimes caused by cantharides.

Dr. De Mussy (*Les Nov. Rem.*) recommends the following as an ointment to be applied along the course of the swollen vein in phlegmasia alba dolens:

R—Ext. Opii,	
Ext. Belladonnæ,	
Ext. Hyoscyami,	
Ext. Conii sem.,	āā grs. xlv.
Adipis pur.,	℥j.—M.

Cover the leg with poultices.

Quinine Insufflation in Whooping-cough.—Bachem (*Centralblatt fnr Klin. Med.*) says he has had excellent results from the insufflation, three times a day, of three grains of a powder composed of finely pulverized quinine mixed with one-third its weight of gum arabic. The process must bring the medicament within reach of all portions of the mucous membrane of the nasal passages. A cure was effected usually within three weeks.

SLEEPING WITH THE HEAD LOW.—The practice of raising the head by pillows during sleep is almost universal, but according to Dr. Meuli-Hilty (*Med. Record*), the reverse position should be assumed when we go to rest. The Dr. made experiments in his own person, and found that when he slept with his head lower than his feet, he always awoke more refreshed and capable of performing better work than after a night's rest in the usual position. He has continued the practice for four years, and considers it is the correct attitude for sleeping. His idea is that the brain receives more blood and is consequently better nourished, hence more capable of hard work. Congestion of the brain is prevented by the thyroid gland, which he found increased in size so as to make the circumference of the neck nearly two inches greater. He also claims it is a prophylactic against pulmonary phthisis, since the apices of the lungs receive a fuller supply of blood, under gravitation, and are therefore more able to resist disease.

IODOFORM IN PHTHISIS.—It is said (*Med. Rec.*) that iodoform is becoming the regular treatment in phthisis and other lung affections. Some Italian medical men have been making extensive trial of the agent, and have found it very beneficial. Prof. Chiaramelli has found after observations extending over four years, that it lessens the fever, and by its antiseptic action upon expectorated matters, so alters them as to inhibit putrefaction. The same gentleman thinks it would be very effectual in the treatment of caseous pneumonia. The drug was on trial in phthisis in Edinburgh for some time, but with what result we do not know. M. Verneuil administers two grains twice a day, suspended in ether, and contained in capsules.

PRURITUS VULVÆ.—In chronic cases, Dr. De Mussy orders as a lotion :—Infusion of marsh mallows, 1 litre; cherry-laurel water, 50 grams; subborate of soda, 10 grams. Also an ointment, to be used night and morning, as follows :—Glycerole of starch, 20 grams; bromide of potassium and subnitrate of bismuth, āā 1 gram; calomel, 40 centigrams; extract of belladonna, 20 centigrams.

THE MICROBE OF RABIES.—Dr. Dowdeswell (*Lancet*) says he has discovered a micrococcus in the spinal cord of rabid dogs, and regards it as specific. It is found in greatest numbers around the central canal of the spinal cord and medulla, but was found in some cases in the blood-vessels. It is difficult to demonstrate, not taking the ordinary stains. He exhibited preparations at the Royal Microscopical Society in June.

ERGOTINE IN BRONCHOCELE.—Dr. James Fox reports a case (*New Eng. Med. Month.*) of bronchocele in a woman aged 43, which had continuously increased since puberty, as cured by hypodermic injections of ergotine. The patient lost 17 pounds in weight in 9 weeks, but at that time the enlargement was all gone, though it had been so large as to cause considerable dyspnœa, as also dysphagia.

LACTIC ACID IN TUBERCULAR LARYNGITIS.—Dr. Theodore Hering has employed the above agent in his hospital. He applied it to the larynx by means of an instrument, commencing with a ten per cent. solution, and increased the strength up to eighty per cent., and in some cases he even used the pure acid. Out of twenty cases only four were not benefited, while four were completely cured, and others variously improved. When the application caused much pain, cocaine was used to allay it.

SANTONATE OF CALCIUM is preferred to santonin by E. Bombelon (*Arch. d. Pharm.*) as a vermifuge. It is a tasteless powder, almost insoluble in water, and to these properties the author attributes the fact that it is more efficient than santonin and less apt to be expelled by vomiting. It should be neutral.

PERMANGANATE OF POTASSIUM IN AMENORRHŒA.—J. Fletcher Thorne, F.R.C.S. Ed., writes to the *Therapeutic Gazette*, that he has never seen the least benefit from the use of the above drug in amenorrhœa, though he has used it in scores of cases No doubt many others have had a similar experience, but have not given their failures to the public.

BRITISH DIPLOMAS.—F. G. Finley, M.D., McGill, and N. S. Fraser, M.B. Edin., have lately been admitted to the membership of the Royal College of Surgeons, England.

Books and Pamphlets.

THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY. A Systematic Treatise on the Theory and Practice of Surgery. By authors of various nations. Edited by John Ashhurst, Jr., M. D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with chromo-lithographs and wood-cuts. In six volumes. Volume VI. New York: Wm. Wood & Co. 1886. 1272 pp.

This is the concluding volume of a gigantic work, which has been six years in completion. The work is excellently done, and must be a source of pride to its Editor, as well as to his fellow countrymen at large. The printers and proof-readers have also done their work well. The whole consists of fifteen articles, as follows: Injuries and Diseases of the Œsophagus, by J. Solis-Cohen, M. D.; Intestinal Obstruction, by John Ashhurst, Jr., M. D.; Injuries and Diseases of the Rectum, by William Allingham, F. R. C. S.; Urinary Calculus, by E. L. Keyes, A. M., M. D.; Lithotrity, by William H. Kingston, M. D., D. C.L., L. R. C. S. E., etc.; Injuries and Diseases of the Bladder and Prostate, by Reginald Harrison, F. R. C. S.; Injuries and Diseases of the Urethra, by Simon Duplay, M. D.; Injuries and Diseases of the Male Genital Organs, by H. Royes Ball, F. R. C. S.; Injuries and Diseases of the Female Genitals, by Theophilus Parvin, M. D.; The Cæsarean Section and its Substitutes; Laparotomy for Ruptured Uterus and for Extra-Uterine Fœtation, by Robert P. Harris, A. M., M. D.; Ovarian and Uterine Tumors, by Charles Carroll Lee, M. D.; Inflammatory Affections of the Bones, by L. Ollier, M. D.; Scrofulo-Tuberculous and other Structural Diseases of Bones, by Eugene Vincent, M. D.; Tumors of the Bones by A. Poucet; the Treatment of Deformities, by Frederick R. Fisher, F. R. C. S. Some valuable papers by well-known men are appended, viz: The Construction and Organization of Hospitals, by Edward Cowles, M. D.; Preparation of Military Surgeons for Field Duties; Apparatus required; Ambulances; Duties in the Field, by B. A. Clements, M. D.; and a History of Surgery, by George Jackson Fisher, A. M., M. D.

DICTIONARY OF PRACTICAL SURGERY. By various British Hospital Surgeons. Edited by Christopher Heath, F.R.C.S., Holme, Prof. of Clin. Surg. Univ. Coll. Lond, etc. Philadelphia: J. B. Lippincott & Co. 1886. Price $7.50.

This work, of 1850 pages, is in surgery what Quain's dictionary is in medicine. Surgical names only, have been used for the various affections, and while the articles are written by the best known surgeons of the day, a uniform order has been followed, viz.: cause, pathology, symptoms and diagnosis, treatment and prognosis. Mr. Heath is so well and favorably known, and his reputation as a surgeon stands so high, that we should expect this work to be *facile princeps*, and a perusal of its pages will not disappoint even the most ardent admirers of the editor. The work has all been written within the last two years, so that its readers may feel assured of finding in it a "compendium of the practice of British surgery of the present day." We heartily recommend the work to practitioners, both for study and reference.

THE PRINCIPLES AND PRACTICE OF MEDICINE. By the late Charles Hilton Fagge, M.D., F.R.C.P., including a Section on Cutaneous Diseases, by P. H. Pye-Smith, M.D., F.R.C.S.; Chapters on Cardiac Diseases, by Samuel Wilkes, M.D., F. R.S., and Complete Index, by Robert Edmunds Carrington, M.D. Vol. II, 8vo. pp. 883. Philadelphia: P. Blakiston, Son & Co. 1886. Toronto: Williamson & Co.

This volume will be welcomed by the profession. It is, in the opinion of most capable judges, the best work on medicine yet published in English. Comment on the value of the contents is therefore unnecessary. The work begins with diseases of the heart and blood-vessels and this is followed by diseases of the alimentary tract, including affections of the nose, mouth and salivary glands. Diseases of the liver, of the spleen and of the lymph glands are next taken up. About one hundred and seventy pages are devoted to affections of the urinary organs, including Addison's disease. The general diseases affecting the joints are considered; this class is made to include gout, acute rheumatism, arthritis deformans and gonorrhœal synovitis. Rickets and mollities ossium constitute the diseases of the bones which are described. The diseases of the blood represented by scurvy, anæmia, hæmophilia and purpura are disposed of in about thirty pages.

Dr. Pye-Smith has occupied about one hundred and fifty pages with diseases of the skin. The work closes with a short memoir of the author.

DISEASES OF THE SPINAL CORD. By Byron Bramwell, M.D., F.R.C.P. Ed. Forty-three colored plates and one hundred and two wood engravings. Second edition. New York: Wm. Wood & Co. 1886. Cloth, pp. 293.

This is an excellent work on a subject which is all too little known by the general practitioner. It is looked upon by competent judges as being one of the best works extant on the subject. The explanations are remarkable for their clearness and lucidity. An important feature is the discussion of concussion of the spine, and the method of examining "railway cases." The publishers have apparently spared no expense to make the work popular, the colored plates being in excellent style and most of the wood-cuts are very plain.

The first chapter deals lucidly and comprehensively with the anatomy and physiology of the cord; the second, with its pathology and the resulting alterations in function. Then follow, methods of case taking, symptoms, prognosis, treatment.

The last chapter is devoted to a tabular classification of the diseases of the cord and description of the individual functions. We heartily recommend the work to those engaged in the study of this difficult branch of medicine.

DISEASES OF THE STOMACH AND INTESTINES. By Prof. Dujardin-Beaumetz, Physician to the Cochin Hospital, etc. Translated from the fourth French edition, by E. P. Hurd, M.D., with illustrations and chromo-lithograph. New York: William Wood & Co. 1886.

Those wishing a comprehensive work on diseases of the stomach and intestines, will do well to peruse this one. The name of the author is now well and favorably known on this side of the Atlantic.

The first five chapters are devoted to the subject of regimen, which is so important a factor in the production of diseases of the stomach and intestines. The work is a thoroughly scientific one, and deals exhaustively with the subject under consideration, while at the same time the matter has been so carefully condensed, that it is not cumbersome. The translator is to be complimented on the truly English ring he has given his sentences.

A MANUAL OF DIFFERENTIAL MEDICAL DIAGNOSIS. By Condict W. Cutler, M.S., M.D., etc. New York and London: G. P. Putnam's Sons. 156 pp.

This little work will be valuable as a book of reference. While we do not think that either the student or practitioner ever learns to diagnose from tables, still there are times when such an arrangement as given by the author will be found exceedingly convenient. The work is carefully done, and the book presents a very neat appearance. It will save a student many an hour's physical work in writing out tables of differential diagnoses for himself.

THE GENUINE WORKS OF HIPPOCRATES, translated from the Greek by Francis Adams, LL.D., Surgeon, in two volumes. Vol. I. New York; William Wood & Co. 1886. Cloth, pp. 390.

This work will be full of interest, not only to medical men, but also to many scholars outside the profession. Dr. Adams has accomplished the task of translation of what was heretofore a sealed book to the majority of readers. The work is well done, and will be read with pleasure by those who desire an acquaintance with the old masters.

SPASM IN CHRONIC NERVE DISEASE; being the Gulstonian Lectures delivered at the Royal College of Physicians of London, March, 1886. By Seymour J. Sharkey, M.A., M.B. Oxon, F.R.C.P., Assistant Physician and joint lecturer on Pathology at St. Thomas's Hospital. London: J. & A. Churchill; Toronto: Williamson & Co.

LECTURES FOR KINTERGARTNERS, by Elizabeth P. Peabody. Boston: D. C. Heath & Co.; pp. 226. 1886.

NOTE.—Will the gentleman who sent us a communication, "Consulting with Quacks," be so good as to forward his card, as we cannot produce anonymous letters.—[ED.

PASTEUR has been granted the degree of M.D., *honoris causa.*

Births, Marriages and Deaths.

On the 11th ult., at Nicolson Square chapel, Edinburgh, Richard C. Coatsworth, M.D., of Toronto, to Mary Eliza Isabella Maude, eldest daughter of the late Mr. John Durham, of St. Catharines.

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Original Communications.

SOME OBSERVATIONS ON DIABETES MELLITUS.*

BY THOS. R. DUPUIS, M.D., M.R.C.S. ENG.,

Professor of Anatomy in Royal College of Physicians, Kingston, Surgeon to the Kingston Hospital, etc.

In discussing diabetes, my object is to direct attention to a few interesting facts in connection with its pathology, its prevalence in this country, and to institute a comparison between the older authorized treatments, and the latest treatment by bromide of arsenic, as far as my experience has extended.

Diabetes, or distinctively *Diabetes Mellitus*, is, as you all know, a disease characterized by an increased flow of saccharine urine. The disease has been known for many years, and the term Diabetes was formerly applied to any augmentation of the urinary flux. In 1674, Willis discovered the sweetness of the urine, previous to which time the true nature of the disease had not, that we know of, been suspected; since that time, however, the presence of sugar has been regarded as a character of the disease, and the name *Diabetes* has now become almost synonymous with glycosuria.

Dr. Cullen, over one hundred years ago, wrote as follows:—"Doctor Willis seems to me to have "been the first who took notice of the sweetness "of the urine in diabetes, and almost every physi- "cian of England has, since his time, taken notice "of the same. Though neither the ancients, nor, "in other countries of Europe, the moderns, till "the latter were directed to it by the English, "have taken notice of the sweetness of the urine, "it does not persuade me that either in ancient or "in modern times the urine in diabetes was of "another kind. I myself, indeed, think I have "met with one instance of diabetes in which the "urine was perfectly insipid. . . ."

But enough of what at the present time we all know. Although this disease is not of very great frequency, its generally fatal character; and when not fatal, the slavish restrictions which it imposes upon its subjects, are sufficient to induce us to hail with welcome any and every method of treatment which holds out a fair prospect of cure, or of a large measure of relief. The disease is not common in childhood, although I have found a number of cases in children reported in the medical journals, and other works which I have consulted, some of them in subjects as young as 3, 2½ and 2 years of age; and such were all fatal. In the early part of adult life, death is more certain from it than in the latter part; elderly persons bearing the loss of assimilated nutriment entailed by it, better than younger ones. The tables of mortality in the Reports of Deaths for Ontario in 1884, afford us a great many interesting facts relative to this disease. I shall quote some of them here.

Out of 21,702 deaths reported in that year, 70 were from diabetes, or 1 in 310. The males were 48 and the females 22. The proportionate number of deaths at different ages are given as follows: under 5 years, 0; from 5 to 10 years, 3; from 10 to 15 years, 6; from 15 to 20 years, 5; from 20 to 30 years, 10; from 30 to 40 years, 13; from 40 to 50 years, 3; from 50 to 60 years, 10; from 60 to 70 years, 7; from 70 to 80 years, 6; from 80 to 90 years, 2; over 90 years, none. According to this tabulation, men suffer more than twice as frequently as women from this disease; childhood is comparatively exempt from it, and the greatest number of deaths from it occurs during the most active periods of life. All the deaths from diabetes which have come under my notice have occurred before, or about, the middle period of life; but I know of several elderly persons who have had the disease for a number of years, and who, by a little proper medication and severe restrictions in diet, are enabled to remain in comparatively good health. It is evident that diabetes is neither epidemic nor

* Read before the Canadian Medical Association at Quebec, August 18th, 1886.

endemic; but there seems to be something in the manner of living amongst certain classes of the community, that renders them more liable to the disease than others are. Amongst the country population, it proves to be more prevalent, according to our own Death Reports, than amongst those of the cities; and the larger the city, apparently, the smaller the proportion of deaths from diabetes. According to reports, in the city of New York, out of 1,379 deaths, only one was caused by diabetes; and in Philadelphia, only one in 875. Taking the five largest cities of Ontario, viz., Toronto, Hamilton, Ottawa, London, and Kingston together, we find seven deaths from diabetes in 4,524 deaths, or one in about 646. Taking all the cities and towns together, and we get 11 from diabetes in 6,737 deaths, or one in about 612. Taking the smaller cities and towns by themselves, we find 4 deaths from diabetes in 1,421 deaths, or one in about 355. Taking the whole Province, and we find 70 deaths from diabetes, in the grand total of 21,702 deaths, or 1 in about 310. But taking the *counties alone*, leaving out all the towns and cities, and we are confronted with the large proportion of 59 deaths from diabetes in 15,657 deaths, or 1 in about 254.

Again, out of the 31 cities and towns in Ontario, 14 (nearly half), viz., Brantford, Walkerton, St. Thomas, Windsor, Kingston, Owen Sound, Belleville, Goderich, Sarnia, Napanee, St. Catharines, Cobourg, Whitby, and Berlin report *no* cases of diabetes; and the large city of Toronto reports only 4; the cities of Hamilton, Ottawa, and London 1 each, and the city of Kingston none.

But when we turn to the counties, the facts are quite different, and add stronger confirmation to the theory which I venture to propound, that diabetes is more prevalent in agricultural regions than in towns and cities—that it is in fact a "*country* disease." *Thirty-nine* counties in Ontario have reported deaths; and only *eight* out of the thirty-nine (only about one-fifth) have reported *no* deaths from diabetes. These are the counties of Algoma, Elgin, Frontenac, Hastings, Norfolk, Oxford, Prescott and Russell, and Welland.

From the scattered situation of the foregoing counties and the proportionately small number which have been exempt from the disease, all notion of any endemic influence is dispelled; but the presumable fact remains, that there is something in the habits of life of our agricultural population which predisposes them to this disease. Of 11 cases of which I have taken note, 7 were farmers or farm laborers; and I think the remaining 4 lived either in small villages or in country places. Authorities state that it is more prevalent in the agricultural counties of England than elsewhere, and in Normandy in France, which is largely an agricultural section of country. Regarding its geographical distribution in the various countries of the world, there does not seem to be a sufficient difference in its occurrence amongst them to lead to any definite conclusions respecting its origin. India, and a few other countries are said to be more liable to it than the rest of the world.

The pathology of diabetes is a most difficult problem; perhaps for 200 years the best minds in the profession have been directed to its investigation, and of late years volumes have been written upon its proximate and remote causes.

Old Cullen, as we call him, came to a conclusion by his acute powers of observation, that "no topi-"cal affection of the kidneys has a share in pro-"ducing this disease, and that a fault in the assi-"milation of the fluids is rather to be blamed, and "that even the *solid food taken in*, increases the "quantity of the urine voided, at the same time "with an increase of the saccharine matter."—*(Pract. Phys. Art., 1510).* Since his time, its origin has been sought for, one might say, in all the different organs and tissues of the body. The brain and nervous system (especially the sympathetic), it has been shown, play a very important part in the production of glycosuria. Some of the experimental operations which may give rise to it are the following, viz.:

1. Irritation of the diabetic centre, which is situated in the floor of the 4th ventricle, at the roots of the pneumogastric nerves. 2. Transverse section of the medulla oblongata. 3. Section of the spinal cord above the 2nd dorsal vertebra. 4. Section of the filaments of the sympathetic n, accompanying the vertebral artery. 5. Destruction or extirpation of the superior cervical ganglion. 6. Sometimes, but not always, division of the sympathetic in the chest. 7. Section or extirpation of the last cervical ganglion. 8. Section of the two nerve-filaments passing from the inferior cervical to the superior thoracic ganglion. 9. Section

or removal of the upper thoracic ganglion. All of them being operations which more or less paralyze the vaso-motor nerves of the liver. (Tyson.)

In a paper by Dr. Hall White, on "the sympathetic system in diabetes," reprteod in the *Brit. Med. Jour.* 1884, pp. 1245 and 1246, he says that by microscopic examination some change in the nerves was found, usually of a chronic inflammatory nature. There was much increase of small cells, great engorgement of vessels, and new growths of fibrous tissue, and such other important changes that he concludes, that the cause of diabetes resides in the sympathetic nervous system. This view is still further strengthened by the fact, that irritation of the central end of the cut vagus will produce glycosuria, but irritation of the peripheral end of the cut nerve *will not produce it;* indicating that the influence of the sympathetic is required.

Since irritation of the cut end of the vagus which remained in connection with the brain was found to produce glycosuria, it was rationally concluded that the pneumogastric conducted the irritation as a sensory nerve, and therefore that irritation of the peripheral distribution of the pneumogastric in any organ to which it is distributed, would, by reflex action, cause it also; thus the *action* of certain drugs, of abnormal states of the stomach, liver, and other organs to which the pneumogastric is distributed, in giving rise to the disease, is accounted for. Irritation of other parts of the sympathetic system of nerves, or of sensory nerves, by diseased organs or otherwise, may, by reflex action, become a chief factor in the causation of this disease. Hence we find in the *Brit. Med. Jour.*, July 11, 1885, a case recorded by Francis Imlach, M.D., in which diabetes was due to ovarian irritation from chronically diseased ovaries, and which was cured by bromide of ammonium and Clemen's solution of the bromide of arsenic, after the "uterine appendages" had been removed. Hence we find such cases as those described by Lawson Tait, which occur in women about the time of the menopause, and which terminate after their systems become accommodated to their changed conditions. Mr. Tait, however, associates eczema of the vulva with these cases. These three conditions no doubt are often found together, but cessation of the menses is not a necessary accompaniment of the diabetes which causes eczema of the vulva; for I have now in my mind the cases of two women, both suffering in a similar manner with diabetes and eczema vulvæ, the one since her menopause a few years ago; the other, being younger, and having had two children since the accession of the diabetes. Some observers maintain that saccharine nirne and certain conditions of the menstrual functions, have an interdependence on one another; and this would not be strange, when we consider the sugar-producing powers of lactation; but it is, nevertheless, doubtful.

Some also have detected marked changes in the brain and spinal cord, in subjects who have died of diabetes; while other, and perhaps equally as acute observers, have not been quite satisfied as to the origin and value of such lesions, or whether they were a cause or a consequence in their relation to diabetes.

Of the *abdominal* organs, the pancreas is the one most frequently affected, a thing we should expect to find on account of the important part which it plays in the digestion of fatty and amylaceous matters. According to Tyson's statements, "it undergoes a pseudo-hypertrophy, consisting chiefly in a hyperplasia of the connective tissue, fatty degeneration of the gland-cells, and atrophy of the glandular structure." Cancerous disease, calculous concretions in the ducts, cystic dilatation, etc., have all been enumerated amongst the post-mortem conditions of the pancreas after diabetes. But I may remark just here, that cancerous disease of the pancreas does not *necessarily* cause *diabetes;* for, less than two years ago, I assisted at a post-mortem examination of a professional brother dead from cancer of the pancreas, and amongst his symptoms had been loss of appetite, little thirst, scanty and high colored urine, and ascites; symptoms entirely opposite to those indicating diabetes.

The *liver* is occasionally changed in character, sometimes being more or less enlarged; at other times being found atrophied. But either of these conditions might be a consequence of the pancreatic disease.

Other authors, from the time of Cullen down to the present, have not been able to connect a diseased state of the liver with diabetes in all cases, inasmuch as it is frequently found quite unchanged, and apparently healthy after death from this disease.

What might be termed the nervo-chemical theory—a theory that would result from a combination of the views of Claude Bernard and Pavy—the former holding in general terms, that the process of sugar-formation in the liver is governed and regulated by the nervous system; the latter holding that the hydro-carbons of the food are stored up in the liver in the form of glycogen, and that under certain abnormal conditions the glycogen is converted into sugar, thus producing diabetes; this composite theory has, I say, received an able advocate in the person of P. W. Latham, A.M., M.D., F.R.C.P., of Cambridge, Eng. In the Croonian Lectures delivered by him at the R.C.P.L., April, 1886, he classes Rheumatism, Gout, and Diabetes in the same category, and ably argues that the whole cause of the incomplete metabolism diabetes, results from an imperfect condition of the vaso-motor system of nerves.

With your permission, I will quote some of his statements; but I can make use of *only some* of them, as they are too elaborately exemplified by abstruse chemical formulæ to make many of them available in a paper like this. He says: "It "remains for me to say a very few words with "regard to the pathology of diabetes, and to ex- "plain why I have classed it together with gout "and rheumatism.

"If the function of the liver be interfered with, "so that there is imperfect metabolism of glucose "as it passes through the organ, this would be a "satisfactory explanation of the origin of the dis- "ease, and we should expect in such cases that the "urgency of some of the symptoms would be les- "sened by careful diet, and abstention from sac- "charine and starchy food.

"But there are other cases in which the diet "seems to have much less effect in controlling the "symptoms; it is this form that I wish briefly to "discuss." "I have endeavored to show," he says, "that in acute rheumatism, by the separation of "the cyan-alcohols from the rest of the albuminous "chain, we have glycocine, and glycollic and lactic "acids formed; the glycollic acid being oxidized "into CO_2 and water, the lactic acid in some mea- "sure being oxidized into these products, and in "some measure passing off by the skin.

"But suppose that whilst the vaso-motor fibres "of the muscular nerve are paralyzed and the ves- "sels dilated, the molecules of a cyan-alcohol are "detached and hydrated into glycollic acid but "only partially oxidized, the result would be that "the glycollic acid would be transformed into car- "bonic acid and methyl-aldehyde and water. "Condensation of six molecules of the aldehyde "may then take place, as it does in plants, and "form *glucose*." He then continues to show how, when the vaso-motor nerves are in a certain paralyzed condition, we may get the formation of not only glucose, but paraldehyde, a hypnotic, oxybutyric acid, and acetone; but the steps of his reasoning are so abstruse and his chemical formulæ so complex, that it would be worse than useless to attempt at this time to follow him. In his conclusion he says: "I have thus endeavored to indi- "cate some of the changes in the nervous system, "the blood, and the tissues, which may take place "in diabetes, rheumatism and gout. . . ." "The "inferences may be wrong, but the facts remain; "and I trust that in this way, at least, I have "helped to a better understanding of these disor- "ders."

It would be quite superfluous for me to say anything about the long train of symptoms that accompany this disease, or to point out the various methods of testing the urine, for I am not lecturing to students, and you all know these as well as, and perhaps much better than I do. I will pass on to the treatment which I have, I may say, experimented with, and to the methods of treatment which I have seen recommended or used by others. In doing this, permit me to arrange in clinical form the few cases that I shall bring before you, which arrangement, although more cumbrous, is better fitted to exhibit the various points in them which seem worthy of remark.

First Case. A young man æt. 27, a carpenter by trade, had suffered from diabetes about 9 months, when I was called to see him. The quantity of urine voided was then growing less, becoming darker in color, and beginning to deposit a sediment on standing. He was greatly emaciated, pulse feeble, had hectic cough and extreme dryness of the mouth; his tongue was cracked, and his teeth and lips were incrusted by dark sordes. About three days after my first visit to him, coma supervened, and gradually grew more profound until it terminated in death on the third day afterwards. It was too late for the action of any

remedies when I first saw the case; but two important facts are revealed by it, viz.: the comparatively short time required for a fatal termination at this age, and the change in the character of the urine, the thirst, and the appetite, towards the termination of the disease.

The Second Case was that of a young farmer, æt. 22 years. He was brought to my surgery on the 25th of May last. He was pale, emaciated, had a dry shrunken look, was so weak that he staggered as be walked. His lungs had not given way, and what he chiefly complained of was utter prostration of his physical powers, and continuous thirst. A few questions elicited the fact that he had diabetes, and an examination of his urine confirmed it, by showing a sp. gr. of 1040, and sugar in abundance, perhaps more than 40 grains to the fluid ounce. On the 27th I was called to visit him at his home; there was no improvement, but he was "easier and inclined to sleep," as his mother expressed it. On the 28th I was sent for in haste to come and see him again; I told the messenger who came for me that I could not do "Charlie" any good, but to please the family I would go. I found that the ease and tendency to sleep of the previous day had passed into coma, and that it was almost impossible to rouse him sufficiently to recognize his nearest friends. The coma deepened, and the following day he died.

On the strictest inquiry I could not find that anything wrong had been suspected in this young man's case, before the latter part of March previous, when his intolerable thirst attracted attention. He had been in the city at school during the winter, and a younger brother who boarded with him told me that he thought it curious that Charlie "made water" so often, during the latter part of the winter. From all the information I could gather, I concluded that this young man did not suffer over four or five months from the invasion of the disease; and then certainly in such an obscure way as not to attract much attention up to a few weeks preceding his death, for he worked on the farm till about a week before he came to see me.

The Third Case is that of Mr. F., a farmer from Amherst Island, æt. 65. He had suffered from diabetes for about a year before coming to me; but latterly he had been growing so much worse that he thought it necessary to apply for relief; this was in the spring of 1881. He was then passing from 10 to 12 pints of urine in the 24 hours, with a sp. gr. of 1030, and containing over 20 grains of sugar to the fluid ounce. As he was losing weight and becoming feeble, I placed him upon a supporting course of treatment, wrote out for him an anti-diabetic regimen, but making it as liberal as possible, substituted glycerine for sugar as a general sweetener of foods and drinks, enjoined moderate exercise out of doors, but no hard work, and strictly charged him to use daily friction of the skin and to wear constantly warm flannel underclothing. He visited me several times, extending over a space of three or four months, took a quantity of medicine home with him, and got so much better that he did not return again for over six months. Having at that time experienced an exacerbation of his disorder, he came to me again in a condition quite similar to, but not so bad as he was in the first place. He attributed his relapse to hard work and errors in his diet. A course of treatment similar to what I had previously prescribed for him had the desired effect of removing his alarming symptoms, and since that time I have not seen him. Last spring, a sister of his came to consult me; I inquired of her regarding her brother's condition, and she replied: "Oh, he keeps quite well; if he were sick again, you would soon hear of it." The old gentleman is now about 70 years of age, has lived six years since diabetes first became manifest in him, and by a strict regulation of his diet and general habits, he is able to keep himself in comparative comfort. The starting point of the disorder in him was, as far as he could discover, working in low lands repairing fences and similar employment during the variable weather of spring, suffering wet feet the most of the time, and getting occasionally drenched by a sudden shower of rain; causes you see which would readily produce rheumatism and kindred disorders.

Bromide of arsenic was not then generally known as a remedy for diabetes, and the medicinal treatment I gave him was as follows, viz.: Five grains of crystallized pepsin, with 20 minims of dilute hydrochloric acid, in water, were given three times a day before eating, and two grains of permanganate of potash dissolved in pure water three times a day, two hours after eating. One twentieth ($\frac{1}{20}$) of a grain of hydrochlorate of pilocarpine placed upon the tongue from two to four times a day

according to the dryness of the mouth, and opium or bromide of potassium *pro re nata.*

The fourth case, and one that made a great impression upon me was that of Father S., a Catholic priest, who lived in a town in Ontario, but whose personal acquaintance I made in Paris. He was a well-developed, fine-looking man, about 40 years of age, active, energetic, well-educated, and a gentleman in every sense of the word.

I was attending the Clinical Lectures of Dr. Charcot, at La Salpetriere, and on Father S's expressing to me a desire to see Dr. Charcot, I took him along with me. After a long and exceedingly pleasant interview with the Doctor he advised him to go to Vichy and try the waters.

The next day the good Father bade me *au revoir* and started for Vichy, saying as he did so that he had tried all the remedies recommended for diabetes; had consulted the best physicians of Canada; had obtained the advice of eminent men in London; and now that he had seen the man he most desired to see he would be guided by his directions. This was in the first part of August. About the first of October he returned and called in Kingston to see me on his way home, calmly stating that he had come home to die; that all his efforts for relief had ended in failure, and that he was satisfied there was no more hope in his case.

This gentleman had been suffering from the disease about four years when I made his acquaintance, and up to that time his chief suffering had been more from inconvenience than otherwise. Then, however, he had begun to experience great muscular weakness, an aversion to every kind of exercise, some confusion of thought, and loss of memory, although at the same time looking plump and healthy.

The history he gave me was that in the summer of 1879, (I think) during very hot weather, he was busying himself amongst some workmen who were doing some work about his parsonage, and he noticed that he became thirsty very frequently, and drank large quantities of cold water without experiencing the relief which ought to have followed them. He, of course, attributed his thirst to the heat; until some days afterwards finding his intolerable thirst becoming persistent, and noticing also that he was compelled to empty the bladder very often, he began to suspect something wrong, and then consulting a physician he was shocked by the sad information that he was suffering from *diabetes mellitus.*

He could assign no cause whatever for the onset of the disease; he had lived a regular, active life; devoted himself zealously to the pious functions of the priesthood, was an enthusiastic and consistent *teetotaller*, and a man of splendid physique.

The fifth case I shall notice is that of Mr. A., a respectable and well-to-do farmer aged 55, and an active and prominent official of the County of Frontenac in the rear of which he lives. He first came to me in the autumn of 1884 having then had the disease for over three years. Beyond a faded and wearied look, there was nothing in his general appearance to indicate the grave nature of the disease from which he was suffering. He complained of general debility, loss of ambition, failure of external powers, inability to think clearly, and more or less difficulty in remembering various incidents; and on examination I found all the characteristic symptoms of diabetes present. He was voiding from 10 to 12 pints per day of almost colorless urine, having a specific gravity of 1035, and containing about 30 grs. of sugar to the fluid ounc.

I placed him upon the same treatment given Mr. F., and enjoined a similar regulation of diet. He was already pretty well acquainted with the "diabetic diet," having used at various times bread made from "gluten flour," ann "diabetic flour and bran."

He continued this method of treatment for about 8 months, and then I added to it the following phosphate mixture recommended by Charteris» (which see) namely: Bone ash of femur 1040 grs., light calcined magnesia, 406 grs, bicarbonate of potash, 900 grs., phosphate of soda, 3520 grs., syrup of phosphoric acid, 9 oz. and water 9 oz. The bone ash was powdered finely and mixed with 4 oz. of the phosphoric acid previously diluted with an equal bulk of water, and after thorough mixing allowed to stand for eight hours. At the same time the magnesia was mixed with enough water to form a moss, and a sufficient quantity of phosphoric acid added to form a solution. The phosphate of soda and bicarbonate of potash were dissolved in 16 oz. of water to which the solution of magnesia was added, and a sufficient quantity of phosphoric acid to form a clear solution; to this was added the bone ash previously mixed with phosphoric acid, and enough water to bring the

mixture up to three pints. This solution was filtered and the filter washed with pure water until the liquid measured 64 ounces. Of this solution fℨi. was given in water three times a day after meals. This you will say is a complicated formula, and ought to be well adapted to a complicated disease! The line of treatment was continued up to the 28th of October, 1885, the only variation being the use of buckwheat flour for bread.

In the spring of last year (1885) I visited England again and finding that buckwheat flour had been highly commended by some authorities as a curative diet in diabetes, I immediately wrote this to Mr. A., and from the time he received my letter till Oct. 28th, as above noted, he had been using the buckwheat, and, he thought, with excellent effects. About this time, Oct, 28th, 1885, although he had gained in weight and strength, the quantity of urine being diminished with a less quantity of sugar, and seemed to be slowly improving, he began to grow tired of such a sameness of treatment and expressed a desire for change. I then, as an experiment, resorted to the treatment recommended by Beach in his "American Practice," continuing the per-manganate of potash, however, only giving it in the form of compressed tablets instead of in solution. Beach's or as it is called the "eclectic treatment" is nearly as follows: Three pills at night and three in the morning, each containing 1 gr. of pulverized capsicum and 3 grs. of extract of dandelion root were administered; and a tablespoonful 3 times a day before meals of the following mixture: Fluid ext. of cimicifuga fℨx. fluid ext. of hydrastis canadensis, fl. ext. of prunus virginiana, of each fℨiii, camphor water up to fℨxxx.

Nov. 19th he visited me again and expressed himself as much better, so that I thought it prudent to continue the same treatment, not neglecting the pilocarpine but omitting the pot. permang, as he complained of its nauseating his stomach.

On the 11th of February last he presented himself before me again really much better in every way than he had been since he first came under my care. Being anxious now to try the Bromide of Arsenic, and to please him by a little change I put him upon three minim doses of "Clemen's Solution," in water three times a day after meals. He has faithfully used this remedy since that time; I have seen him three times since then, and he has expressed himself as feeling "pretty well;" his urine has been less abundant, sp. gr. lower quantity, of sugar diminished, the bad feelings in his head gone, his general strength improved; and the last time I saw him he stated that he had gained seven pounds in weight. On the morning of August 17th, I received a letter from this gentleman, which concludes, "I feel middling well at present."

The sixth I shall notice is that of a general labourer, aged 33, by the name of Norris. Him I admitted in the Kingston Hospital on the 23rd of last February. He was very weak and anæmic looking, his pulse quick and feeble, tongue coated, bowels constipated, appetite poor, and thirst unquenchable. He was passing 12 qts. per diem of colorless urine, sp. gr. 1040 with about 40 grs. of sugar to the fluid ounce. After his bowels were freely opened he was restricted to an anti-diabetic regimen and given Clemen's Solution of the Bromide of Arsenic in 4 minim dose 3 times a day. On the 16th of March his urine had diminished in quantity to 8 quarts per diem, sp. gr. lower and sugar less. He was feeling so much better that in spite of all my persuasions he left the hospital and went home—a distance of 40 miles—to visit his friends. In about a month he relapsed into his former condition, and returned to Kingston to enter the hospital again; on arriving in the city he went to a friend's house to stay over night, and was found in the morning dead in his bed.

The seventh case, and the last I shall notice, as time would fail me to do more, is that of Richard B., a well-to-do farmer from Renfrew, aged 36; and who as well as Mr. A., is still under treatment. He came to me on the 12th of May last, weak and thin, having in addition to the usual symptoms of diabetes a hacking bronchial cough which worried him greatly. He had been suffering from diabetes for 14 months, and during this time had been treated with iron, strychnine ergot, etc., without experiencing any relief. On examination I found him passing 16 pints of urine per day; its sp. gr. 1034 and the sugar about 25 grs. to the fluid ounce. He was ordered anti-diabetic regimen, given $\frac{1}{30}$ gr. doses of pilocarpine to be placed on his tongue three times a day; and $3\frac{1}{2}$ minim doses of Clemen's Solut. Br. Ars. in water three times a day after meals. On account of his dyspeptic condition and debility, I gave him pepsina and H. Cl. with glycerine and water before

meals. He straightway began to improve. He visited me again on the 12th of June, feeling a great deal better; quantity of urine 12 pints per diem; sp. gr. 1032; sugar 30 grs. ad. f℥i. Treatment contiuued the same excepting a slight augmentation of the dose of Bromide of Arsenic.

July 27th he sent me a bottle full of his urine accompanied by a letter stating that he felt "much stronger," and was passing only ten pints of urine per day. The sp. gr. of it was 1030, and the quantity of sugar 22 grs. to the fluid ounce. On the morning of the 17th inst., I received a letter from this gentleman also, in which he says, "I have been loose in my bowels during the last week. I think it is using so many berries and vegetables that keeps me right; I am never so thirsty, and I feel better when I am loose in my bowels; I have used no medicine but the diabetic," (Clemen's Solut. Brom. Ars.) this last four weeks: my appetite is so good that I thought I need not. The last bottle puffed my face and legs. Send me another bottle of "diabetic medicine?" So that Mr. B. is evidently improving. I have four cases more on my note book which possess some points of interest but which for the present I must omit.

Let me now notice more particularly a few of the foregoing cases, in some of their features. The first two cases noticed show the rapidity with which diabetes does its fatal work in young subjects, and is a good illustration of the change in symptoms and the coma that supervenes during the last few days of life. To these might be added also the case of Norris, for he told me he had had the disease only 9 months.

Mr. A., has had the disease for more than five years, has tried a variety of treatment and is certainly better now than he was two years ago. He seemed to have been benefited somewhat by all the medicine he had taken and at present seems to be quite well satisfied with the action of the Bromide of Arsenic which he has now been using for nearly eight months. He thought at one time that he was greatly improved by the use of a medicine which he was in the habit of buying from an advertising physician in Detroit; becoming tired of paying ten dollars every few weeks for a package of white powder not much bigger than an ounce of tea, he brought me some of it for examination. On analysis by Prof. Goodwin of Queen's University, it proved to be a mixture of salicin and bicarbonate of potash. But it must not be forgotten that Mr. A. has become an expert in regulating his anti-diabetic diet, and has fully tested the virtues of "gluten flour," "diabetic flour," and the common coarse flour vulgarly called "canaille," and has given the preference to the last.

Not long ago he brought me a specimen of each for analysis, and I submitted them to Prof. Goodwin of Queen's, who reported upon them as follows: Sugar producing material in *gluten flour* 65.79, *diabetic flour* 66.24, *canaille* 65.33, in an equal given quantity of each; and thus proving the correctness of Mr. A's experience. Of course the canaille while it contains less sugar forming material may also contain less nitrogenous matter.

Mr. Norris, certainly was much improved in the three weeks he remained in the hospital; but how much of his improvement was due to the bromide of arsenic I gave him, and how much to the strict regulation of his diet, it is impossible to say.

Mr. F., the third case noted, got well, one might say, upon a treatment in which bromide of arsenic had no place, as it was not then known as a remedy for diabetes; but his diet was regularly attended to, and kept within prescribed limits.

The case of Father S., illustrates the utter uselessness of all remedies in some cases, and the steady march of the disease to a fatal termination in spite of the best known medical treatment, diet, foreign travel, medicated waters, etc., and is an instance of its occurrence without any discoverable cause in a person who looked to be in every other respect strong and healthy,

In the case of Mr. B., I can see no reason to question the good part played by the bromide of arsenic; but his diet and drink also were so carefully regulated, and he took in addition pilocarpine pepsin, and hydrochloric acid, so that I am not in a position to say that the Br. ars. *alone* would have wrought the change which has already taken place in him; from his last letter however it seems to be the chief agent. I shall certainly experiment with it entirely alone when I have opportunity, but hitherto I have been like a boy learning to swim, afraid to leave his "floaters" and plunge out into deep water.

Two of the cases, a male and a female, which I have in my note book but which I have not detailed here, had slight glycosuria with polyuria,

and both were quickly improved in their condition by the Br. ars.

I first saw favorable reports of this remedy in the *Br. Med. Jour.* in 1883 or 1884, and in 1884 I noticed that Austin Flint, jr., had been using it with success. He insisted on a strict regulation of the diet and said then "Clemen's Solution of the Bromide of Arsenic appears to be useful," and recommended it in doses of from three to five drops given in water three times a day after meals, and stating that it might be continued for weeks and months without any unfavorable effects, "but" he added "the administration of this remedy does not supply the place of dietetic treatment which should be enforced in all cases." (*Can. Lan.* Nov. 1884, p. 88). In the *Br. Med. Jour.* 1885, p. 701, the same gentleman is reported as having said "diabetes has become to-day a disease easily and certainly curable, provided the treatment be not begun too late; and the treatment referred to, was strict regulation of diet and Clemen's Sol. Br. Ars.

From my limited experience I am in accord with Dr. Flint on the importance of the regulated dietary, and think with him that the bromide of arsenic is a valuable medicine in diabetes, but I cannot go the length of saying that I believe diabetes to be easily and certainly curable by it.

Sulphide of of calcium and jambol have recently been brought forward as curative agents in this disease, but I have had no experience with them.

I need say nothing respecting a diet list, as every systematic work on medicine contains all that is needed. Charteris' little book, Pepper's System of Medicine, "The Home Practical Physician," and many others, give convenient and valuable lists.

Milk was long a questionable article of diet, but all authorities now agree that skimmed milk is not only permissible but is a valuable addition to the dietary. I have ventured to suggest Koumyss as as a drink for diabetics, from its composition as given by the manufacturers of it in Toronto.

NOTE.—Since the foregoing article was in the Printer's hand I had a letter from R. B., in which he says he is feeling well and working hard. Mr. A. was at my surgery a few evenings ago and expressed himself as feeling much stronger and very well. Both are now using the Bromide of Arsenic alone.

THE PROGRESS OF MEDICINE.*

BY T. K. HOLMES, M.D., CHATHAM, ONT.

President of the Association.

After thanking the Association for the honor conferred upon him in electing him as their presiding officer, he alluded to the historic associations of the City of Quebec, and said, in this land there is arising a temple whose foundation is based upon the accumulated labors of some of the greatest architects of human happiness. Their names shine with brilliancy unabated all down through the vista of past years, and animate and enlighten all who labor in the same profession, and emulate their achievements. We are the privileged architects of this temple of medicine in our country and generation, and I trust that the marks of our skill may not be indistinguishable in the rising edifice. The progress of scientific medicine in the recent past is the result very largely of the development of the science of biology which has done so much to establish medicine on a scientific basis. Until the study of life in its elementary forms was rendered possible by modern instruments of precision, empiricism necessarily entered largely into all medical progress, and it was maintained as an opprobrium that medicine was no more than an enlightened empiricism. This is true, but it could not have been otherwise since, until the birth of biology as a science, medical knowledge had either to remain at a stand-still or to progress by a series of empirical jumps which sometimes left it in a more advanced state of usefulness, and sometimes failed to do so even in the slightest degree. Although empiricism in medicine has been such a laborious means of advancement, we must admit that it generally contained some grains of truth, and that when it failed to accomplish what was expected of it, the reason of the failure lay, not in the worthlessness of the efforts at progress, but in the difficulty of separating the grains of truth from the abundant chaff in which it was contained. Each new fashion, while it has contained some truth, has failed and given place to another little in advance, not because it contained no truth, but because the truth it did contain was incomplete. When, however, the study of biology was es-

*Abstract of the address delivered before the Canada Medical Association, in Quebec.

tablished on a scientific basis, medicine, which is but an applied science of biological doctrine, became less empirical and more scientific, and by the aid of physiology and pathology, which are the necessary sequence of biological investigation, has advanced to the present high and satisfactory position it occupies. The very fact that morbid processes are viewed and studied from a physiological standpoint, and are estimated and measured by the laws that govern elementary processes of life, renders it certain that the progress of the recent past and of the present is on surer lines and firmer foundation than ever before, and that the future of medicine will be the glorious sequel of the present, as the present is the glorious sequel of the past. It justifies the belief, that the advantages to the human race likely to accrue from the prosecution of medical studies and investigation pursued on these lines, will be far greater in the future than in the past, that physiology and pathology, which are but in their infancy, are destined to illuminate the dark places in medicine and reveal the true cause of much human suffering and premature death.

We are accustomed to regard with wonder the achievements of modern invention in the art of war, and to contemplate with amazement the perfected instruments of destruction that strengthen the hands of modern belligerents, but the general who advances to battle with all these at his command has no greater advantage over a barbarous foe than modern medical searchers after truth in the realms of disease have over their empirical brothers of the prebiological period. Possessing these advantages, and stimulated by this prospect, it is reasonable to suppose there will, in the near future, arise men whose investigations, beginning where those of Sanderson, Koch, Virchow, and Pasteur leave off, will be equally brilliant and equally conducive to human happiness and longevity.

The country that produces these men will be the country that affords the best medical education to those entering the profession, and that most facilitates original investigation for those who have chosen that field of labor. No physician in this country worthy of the profession to which he belongs can be indifferent to the position Canada shall occupy in the honorable and honored competition in which so many are and will be engaged. The future of the medical profession in this as in any other country will largely depend upon the natural ability and the mental and moral training in childhood and youth of those entering its ranks; so that in considering any scheme for the creation of a high standard of medical qualification, domestic training and the plan of education pursued in public schools must be recognized as bearing an important part.

The efforts to establish and to maintain an efficient system of education in this country are worthy the highest commendation, but the task is a difficult one, and there is danger of enthusiastic legislators over-stepping the mark and making our sons and daughters mere receptacles of knowledge instead of creators of knowledge, by failing to recognize that it is vastly more important that a man should think and reason correctly than that he be the possessor of multitudes of facts and definitions. Physicians, with such questionable elementary training, are like the artificer well supplied with the tools of his craft but lacking the skill to use them. It is not to such that we may look hopefully for real progress in our science; they make up the great army of routine practitioners who trouble themselves little with profundities, and are like Dr. Sangrado, who felt quite sure that those of his patients who, under the care of his pupil Gil Blas, died from excessive bleeding and the copious drinking of warm water, did so because this his panacea was not applied with sufficient vigor and determination.

It is probable not incorrect to say that most medical men in Canada are of opinion that the chief defect in our school system lies in the oversight here referred to. The curriculum for medical matriculants in Canada must create a higher average intellectually among young men aspiring to the profession, but there can be no doubt that a widening of the curriculum so as to embrace a more extensive knowledge of the natural sciences would greatly facilitate the acquisition of knowledge presented to, and required of, medical students. An acquaintance with the laws relating to climatology would serve a useful end in the study of epidemic and endemic diseases, and in an estimate of the influence of climate on disease in general; an acquaintance with minute organisms and histological structures, such as could be readily acquired in any high school provided with a microscope, would prepare the mental soil for the reception and

quick germination of the seeds of knowledge sown by teachers of physiology and kindred subjects in medical schools. The medical student who learns something of biology, of cells and germs, and of bacterial life only after he has entered upon his course of medical lectures, is at a great disadvantage and loses much time in a bewildering effort to master names and technicalities, and I can conceive of no more irksome task for a teacher than to lecture to a class of young men laboring under this disadvantage.

He next referred to the brilliancy of the discoveries in medical science within the past fifty years. Physiology, pathology, the etiology of disease, physiological medicine, preventive medicine, these are some of the fields laid open to the modern physician, and they leave no lack of opportunity for the exercise of ambition, skill, and philanthropy. Nearly all the European nations and the individual States of the neighboring Republic have shown their determination to participate in the honorable achievements in medicine thus rendered possible in the near future. Schools for the pursuit of original investigation have been liberally endowed by these governments, and this liberality has been supplemented by the wise and princely donations of private individuals. Sanderson and Klein, Koch and Pasteur, our own Osler, and many others scarcely less distinguished, are devoting their lives with indefatigable zeal to the elucidation of scientific questions upon which rests the superstructure of medical practice, and they are enabled to do so only through the liberality of the various governments under which they live. Research of this kind can only be carried on successfully by men naturally adapted to such work, and who are free from the care and anxiety inseparable from the lives of those engaged in the active practice of their profession. Hence the absolute necessity for the endowment of institutions of this character. The large expenditure necessary to the equipment of a laboratory for such work has greatly retarded it in Canada, and until means are provided we must be content to occupy an insignificant place in the great race now being run. Can it be that this country or its wealthy citizens will remain indifferent in this matter, while our nearest neighbor is lavishing millions of dollars to attain honorable eminence in the progress of medical science? Scarcely a State in the Union that has not its well endowed university, and the princely gifts of Cornell, of John Hopkins, of Mr. Stanford, of Mr. Vanderbilt and of Sir Donald A. Smith are the great beginning of greater things. Who can estimate the blessings to the human race that must arise from the wise munificence of these noble men! Millions yet unborn shall speak their names with feelings of reverence and love, nor will other monuments be needed to make their names immortal. In this connection, I would suggest that a committee of this Association be appointed, to report at the next annual meeting upon the best means of establishing one or more laboratories where original investigation in medical studies may be carried on.

Medical Societies constitute a most important factor in the advancement of medical knowledge, and it is much to be regretted that they are not everywhere established. It is safe to say that the maintenance of active local societies contributes immensely to the knowledge of their members by encouraging careful observations in private practice, and more extensive reading and research. Aside from a scientific point of view, the harmony engendered by these meetings eliminates much of the jealously and misunderstanding that are so humiliating and so subversive of individual happiness and public respect. The general organization of small local societies would be a sure means of improving the representation at the larger ones, and would secure to them papers and discussions of a higher character. Provision has been made in Ontario by the Medical Act for the formation of territorial associations in the different electoral divisions, and in some of them most prosperous societies have existed for many years, and the reports of their proceedings constitute valuable additions to medical literature.

Of all the means of medical progress, few could be more advantageously utilized than the accumulated experience of men in private practice if they could be induced generally to keep a systematic record of their more important cases. Time, skill, and the privilege of post-mortem examinations are essential to the successful recording of cases, and their absence is doubtless the chief cause of the neglect so universal in this matter. Time so consumed would be more than repaid by the increased skill acquired; the high standard of qualification now required of graduates should remove the

second difficulty; and if requests for autopsies were made in all cases necessary to verify a diagnosis or to elucidate an obscurity, the prejudice now existing against them in the public mind would, to a great degree, disappear. Let rural practitioners who underrate their opportunities of contributing to the general fund of medical knowledge, remember that Jenner, McDowell, and Koch were not metropolitan physicians, and were unknown to fame until their great discoveries, wrought out by diligent study and observation, placed them among the great benefactors of mankind. Observation and reflection are the parents of discovery, and never fail to produce their offspring, although the gestation may be long and the labor hard. Every truth so revealed is like a lantern, the light of which may be turned on the dark places of our field of investigation, and new truths stand clear to our mental vision, and we walk boldly and safely on, using each new thought to illumine the obscurity that surrounds and precedes it.

The building up of a science is a slow and laborious process, and facts must be supplied by a multitude of workers. The scholar who deciphers the cuneiform inscriptions of ancient Babylon or the hieroglyphics of Egypt, and contributes to our knowledge of these nations, must be aided and preceded in his work by the archæologist who discovers, and the laborer who unearths, these imperishable records of past events. So in the building up of medical science, the humblest worker is not to be despised, for his contributions may be and often are essential; but to be available, his thoughts and observations must be recorded, that they may be weighed and winnowed by those suited to the task. All who have read the lectures of Murchison on "Functional Diseases of the Liver," of Roberts on "The Digestive Ferments," or Osler on "Malignant Endocarditis," must be impressed by the great impetus given to practical medicine by these, and will need no arguments to convince them of the desirability of the endowment of similar lectureships here. From a literary and scientific standpoint, the advantages accruing to the profession from such lectures would be important, but of even more importance would be the encouragement afforded to the more gifted and aspiring of our own Canadian physicians and surgeons. As Canadians we may feel proud of our country and of its physicial and political excellencies, but we may rest assured that, so far as we medical men are concerned, others will estimate us by the reasonable and practical standard of our contributions to medical knowledge and by our scientific attainments. No conservative clinging to obsolete methods on the one hand, or the multiplication of weak meretricious literature on the other, can impose upon the learned in the professional world, and the sooner we create strong incentives to scientific work the sooner will the workers be forthcoming I would here offer the suggestion that this Association take into consideration the establishment of lectureships similar to those in England and other older countries.

He concluded his most eloquent address in the following terms. In the not-distant future this Dominion will be the home of fifty millions of people with all the wealth and all the greatness that implies; a thought that may well inspire us with feelings of pride and satisfaction; but the wise man will not be so much impressed by the vastness of our territory, the multitude of our people, or the size and wealth of our cities, but will be more concerned in the problem of the social advancement, the civil liberty, the physicial perfection, the scientific status and the moral rectitude of our teeming population. When that time comes may the science of medicine have contributed its share towards the creation of a people unsurpassed for physicial perfection and mental sprightlinesss and for all those virtues that are born of these. Should these hopes be realized, then indeed would happiness prevail and prosperity sit as a ruling genius on the brow of every hill, the bosom of every lake and the bank of every stream; and the application to our country of the language of one of England's greatest poets would scarcely be considered hyperbolical, when he says:

"All crimes shall cease and ancient fraud shall fail,
Returning Justice lift aloft her scale,
Peace o'er the world her olive wand extend,
And white-robed Innocence from heaven descend."

EFFECTUAL TREATMENT OF HYSTERIA*

BY DR. MARK CHAUMONT.

Much has been said concerning hysteria for many years. Some describe it as a physical manifestation of little consequence; others attach great import

* Translated from the *Gazette des Hopitaux.*

ance to it as a phenomenon of the intellectual order. Some go even so far as to suggest things most *outre* of those patients capable of being hypnotized, and who on awaking, execute faithfully the orders given. Hysteria, in short, expounded by some magnetizer, ignorant of medicine and conducted in fashionable drawing rooms, is paraded among the lower orders of society before interloping and dull amateurs. We do not hesitate to say that these things are sad enough. For us, a convulsion of hysteria is a serious malady, and we place a just estimation on the means of curing it. As for making it an amusing puppet, bearing the sign and life of a nervous affection, we regard it as most reprehensible.

Seeing that so little is said of the therapeutics of hysteria, I feel it incumbent on me to refer in a few words to some happy results in my private practice. As physician to a manufactory employing a very considerable number of women, I have seen much hysteria, and have come to the conclusion that it is a much more serious affection than is generally believed. In a certain number of patients, I commence at first by giving attention to the general condition. To this effect I prescribe cod-liver oil, bitterwort, iron, quinine, beer, cold baths, etc. Having thus prepared the way for special treatment, I administer, if the attacks of hysteria appear frequently, three teaspoonfuls of Henry Mure's syrup in a little water, after each meal, during a month. The crisis is arrested; the patient is less nervous, more calm, better disposed, and performs her work with animation. I take advantage of this improvement to suspend the medicine and prescribe exercise, order milk in the way of diet, and to carry out certain recommendations appropriate to the condition, situation and idiosyncrasies of the patient. At the end of a month or six weeks and sometimes two months, unless an attack of hysteria should occur in the interval, I resume as before the use of the syrup in the same doses, during a month (menstrual period included); then I discontinue it one, two or three months, in the meantime supporting the general system by appropriate nourishment, and ordering, according to the case or the season, cold water, sulphur, or alkaline baths, and dry friction of the body morning and evening. I repeat this regimen in the same manner several times, and, most generally, the attacks of hysteria will have entirely disappeared at the end of a year or eighteen months. Of course these patients remain exposed to worries, irritabilities, vexations, passing jealous manifestations, restraint of rules, atmospheric influences, etc., but the attacks do not show themselves, or appear very rarely. The remedy, moreover, is so highly regarded, that the women themselves, when they feel *ennerved*, as they express it, prescribe it and take it until they feel relieved.

Why has Henry Mure's syrup, which has been attended with such immense success in the treatment of epilepsy in Europe and America, not been placed at the head of anti-hysteric medicines? It succeeds, I affirm, in nine-tenths of the cases, except when given in relatively weak and intermittent doses. Whilst this remedy, so efficacious, has only determined the cure of a great number of epileptics by the aid of large and long continued doses, it does not follow, on the contrary, that good results may be obtained in hysteria by means of a lesser dose and a usage not continued. This, I believe, has never been said, which is a matter of considerable practical importance.

The association of different bromides among themselves and the combinations of certain therapeutic agents with the bromide of potassium, fail in their effects constantly. The bromide of potassium, moreover, is very rarely obtained pure. That which justifies the esteem of Henry Mure's syrup, is, that physicians all over the country know that the medicine contains a bromide exceptionally pure; that each teaspoonful represents exactly 50 centigrammes of salt, and that this preparation, applied to the treatment of nervous convulsions, has performed everywhere the most successful cures. There is nothing so successful as success. Henry Mure's syrup may be obtained in all good pharmacies and from the manufacturer, M. Henry Mure, pharmacist, Pont St. Esprit (Gard.), France.

Correspondence.

To the Editor of THE CANADA LANCET.

SIR—In this neighborhood we have not escaped the "bane of society and curse of the profession," viz.: the "Quack." We have one who has flourished in our midst for several years, and who not content with being allowed to practice undisturbed seeks on every occasion to establish a practice for himself by assailing and libelling the reputation of

the legitimate practitioner, and by imposing upon the credulity of the people. Already has he been before the courts where a letter was produced in his own handwriting in which he offered the medical registrar of the Province the sum of two hundred dollars as a bribe to grant him a license; but he reckoned without his host. The offer was rejected with scorn as became an honourable gentleman and practitioner. On that occasion he was fined twenty-five dollars, but this has not checked his illegitimate practice, and he is now more cheeky than ever. But what do the members of our profession think of the action of one of our old practitioners, who was instrumental in securing the passing of the Medical Act for the protection of the public and the profession in consulting with this same quack. Is it not surprising that the worthy Doctor should so far forget his duty to himself and his profession as to so demean himself in this manner? Had he done such a thing where he came from in Ontario he would have been severally censured by his medical brethren; but probably he imagines the dignity of the profession is not of much importance in Manitoba.

Yours, etc.,

MEDICO.

Minnedosa, Aug. 3, 1886.

Reports of Societies.

HAMILTON MEDICAL AND SURGICAL SOCIETY.

The regular monthly meeting was held on the 13th September—Dr. Stark, President, in the chair.

Dr. H. S Griffin exhibited a specimen of cancer of the stomach from a negro woman about 65 or 70 years of age. Had six or eight children, all of whom are dead. When Dr. Griffin first saw the patient she complained of constant and troublesome spitting of water, which also escaped from the mouth during sleep; there was also regurgitation of fluids after drinking. Had been losing flesh rapidly. At one time raised about a pint of pus. *Post-mortem* revealed general thickening of the walls of the stomach. There was narrowing of the œsophagus near the cardiac orifice of the stomach. The only other abnormal condition found was some fibroid tumors of the uterus.

Dr. Mullin related a case of a woman who had been ill for two or three years. On making an examination, found two or three lumps in the right iliac region extending upwards, about twice as large as the thumb, and moveable, sometimes disappeared altogether. *Post-mortem.*—Stomach dilated, walls very thin, greater curative reached as far as the umbilicus. There was mueh thickening of the pyloric orifice, the opening being only large enough to admit a small catheter. No evidence of secondary deposit in any other organ. The descending colon had a mesocolon fully six inches in length, and the bowel was lose and floating, a condition which would have rendered the operation of colotomy difficult if not dangerous. The uterus was exhibited, the right ovary was normal, the left contained the remains of a cyst which had collapsed. A band extended from the omentum near the transverse colon, about the situation of the pyloric orifice of the stomach, looped around the head of the ascending colon and cæcum, and passed over to the left ovary where it was attached, forming nearly a half circle. The tumors mentioned above were supposed to have been formed by this band, retaining fæces in the intestines at times, being moveable and then disappearing as stated above.

A committee consisting of Drs. Malloch, Mullin, Macdonald, White, Leslie and Griffin was appointed to report on the pollution of the waters of the Bay by sewage, and the best remedy for the evil.

DOMINION MEDICAL ASSOCIATION.

(Continued from last month.)

SURGICAL SECTION.

Aug. 18th.

Dr. Desjardins, of Montreal, read a paper on "Keratoscopy as a means of Diagnosis in Astigmatism." After defining the term astigmatism, he said that errors of refraction affect the vision injuriously, although the optic nerve be healthy. It was formerly supposed that the fault was in the lens, but it is now known to be due (as was first pointed out by Donders) to the curves of the cornea. The lens, according to later investigators, partakes of the same deformities as the cornea. Accommodation is not without influence on refraction.

Dr. Jas. Bell, of Montreal, read a paper on "Tracheotomy in Membranous Laryngitis," in which he advocated dispensing with the tube in the after-treatment of tracheotomy. He preferred late to early operations in membraneous laryngitis for the following reasons, viz.: (1) If patient were operated on early, many would be operated on unnecessarily; (2) Extension of membrane takes place more rapidly after tracheotomy; (3) If the obstruction is not rapidly produced, membrane is separated and expelled. The recoveries after early operations were 25-33 per cent.; after late opera-

tions, 5-10 per cent. After discussing the subject as to whether diphtheria is or is not primarily a local disease, he gave his reasons for not liking the tube in tracheotomy: (1) The tube never accurately fits; (2) When the tube is in place, the incisions into the trachea cannot be kept under observation; (3) Occasionally the tube from not being in the middle line, and being left too long in the trachea, ulcerates through, and an artery may be opened; (4) When the tube is in the trachea, there is difficulty in expelling through it pieces of membrane; (5) The tube causes sometimes exuberant granulations and warty growths. In place of the tube Dr. Bell has devised an instrument which he thinks does away with the objections to the tube. It consists of a pair of "clips," which catch the edge of the trachea and hold it apart. They are held in position by a tape which goes round the neck. He had experimented with the clips on a number of dogs, and and found that they held well and no ill results followed.

In the after-treatment of cases in which the "clips" are used, he withdraws the mucus, etc., from the trachea by means of a glass pipette. After operation he plugs the trachea or larynx above the wound with antiseptic sponge; this absorbs the discharges and helps to localize the membrane. Over the wound he keeps a piece of gauze and he occasionally introduces vaseline into the trachea. When the tube is used, after two or three days the breathing becomes dry, and the end of the tube becomes coated with inspissated mucus; below this, in the trachea, is a cone of dried exudation, which helps to block up the passage.

Dr. Bell gave the histories of two cases of diphtheria in which he had operated and used his "clips." One case died, and the other—aged twenty-five months—recovered. In nine cases of tracheotomy in which he had used the tube, all, with one exception, died.

Dr. A. L. Smith believes that the "clip," introduced by Dr. Bell, will prove of the greatest possible benefit and will in all probability reduce the mortality after the operation.

Dr. Kerr did not think that tracheotomy is a good operation, and had seen most desperate cases recover without it. If Dr. Bell's treatment without a tube reduced the mortality, it would be a great gain. His last tracheotomy case lived three weeks and died of paralysis, so that it is not always the extension of the membrane that kills after tracheotomy, and the best after-treatment will fail to produce a good result. He was very doubtful about the good that would result from plugging the trachea above the wound.

Dr. F. J. Shepherd said that he had performed tracheotomy a number of times both in hospital and private practice. His first ten or a dozen cases were all fatal, but during the last two and a half years he had performed tracheotomy in private practice sixteen times, and had had five recoveries. In hospital practice his results were not so good. He thought that the kind of instruments used did matter much; it was important that the wound should be kept aseptic. He removed the tube as early as possible, never later than the fifth day, in one successful case he removed the tube on the third day; they were all cases of diphtheria. Dr. Shepherd believed that after operation it was useful to have a warm room (75°-80° F.), and that the atmosphere should be saturated with moisture. He always used a croup or closed bed, and the steam of the kettle was conveyed into it by a huge spout. The inner tube was removed every hour and the outer one on the second day; lime-water was occasionally dropped into the tube. He thought that the tube favored expulsion of membrane.

Dr Russell was formerly opposed to tracheotomy but now thought early operation advisable; if the operation did not cure, it always relieved, He had performed tracheotomy six times with two recoveries. He thought Dr. Bell's instrument a very ingenious one, and likely to prove very useful.

Dr. Fenwick, of Montreal, said that he preferred the high to the low operation. Dr. Bell's instrument appeared to answer very well.

Dr. Fenwick, of Montreal, read a paper on "Treatment of Tuberculous Glands of the Neck." He believed that scrofulous glands are intimately connected with tubercle. After giving a sketch of the history of tubercle and Koch's discovery of the tubercle bacillus, he said that there must be some predisposing condition in the individual so that he can contract tubercle—the proper soil must be present. The glands of the neck are specially liable to infection, especially the submaxillary and those over the large vessels. Enlargement is rarely single and occurs generally at first on one side of the neck only. In scrofulous enlargement of the glands of the neck the author strongly advised early removal of enlarged glands. After removal the general health of the individual improves; if they are left, the patient runs the risk of general tuberculosis, and if he recovers it is with impaired health and a number of disfiguring scars on the neck.

Dr. Kerr, of Winnipeg, was not satisfied with the results of operations and did not now operate so often as formerly; he found the operation not only very tedious but difficult and dangerous, and the results were not always so good as represented.

Dr. Shepherd, of Montreal, confessed that the results of operation were not always so perfect as were described by the enthusiastic advocates of the operation, but in many cases the results are entirely satisfactory. After incising the deep fascia, he prefers removing the glands with the fingers, with an occasional cut with a knife. He

has never had any accident attending the operation. Although he has had no experience with Treves's cautery puncture, he does not think it suitable for glands deeply placed. In sinuses and scrofulous ulcers, he has had most excellent results from scraping out the parts with Volkmann's spoon.

Dr. Trenholme, of Montreal, read a paper on "Some Details of Uterine and Ovarian Operations." After describing the usual precautions that should be taken regarding the cleanliness of hands, sponges and instruments, he said that he prefers No. 1-20 shoemakers' thread to any other form of ligature. Before use the thread should be immersed for twenty-four hours in pure carbolic acid, and not put into water at all. In closing the abdominal wound, he uses silver wire for the deep sutures and horsehair for the superficial. He laid great stress on the importance of not enclosing any muscular tissue in the suture. He advised short incisions of two or two and a half inches. Muscle should never be cut in the incision, as it gave great trouble afterwards. The pedicle of the tumor should be ligated in small segments, and the large vessels should be ligatured separately and the ligature cut short. The cavity of the abdomen should be thoroughly cleansed with sponges, and drained when necessary. He allows his patient after the operation to move freely in bed; this favors the reposition of the bowels In uterine fibroids, when large, he always divides the mass in the median line, then each half is enucleated. The stump should be cut in shape of a V, and the edges brought together with a running suture and quilted with the shoemakers' stitch. He has found linseed-tea enemata of great service after operation; fomentations to the abdomen were also very beneficial. No after medicinal treatment is needed, except when there is vomiting; in this he has found sipping hot water useful, and also ipecacuanha in homœopathic doses. He uses the third dilution.

Dr. Macfarlane, of Toronto, would have liked to hear Dr. Trenholme say more about dietetics. In his operation he had found vomiting to be a very troublesome complication; warm water with a flavoring of brandy he had found of great services in these cases, also frequent small doses of Epsom salts as recommended by Lawson Tait. He never gave any medicine at all when there was any threatening of peritoneal trouble. He never used drainage unless the adhesions were extensive.

Dr. Kerr would like to know why Dr. Trenholme objected to including muscle in his sutures.

Dr. Shepherd, of Montreal, did not understand why an abominal wound should heal so differently from wounds in other parts. So far as he himself was concerned, in performing abdominal section he treated his incision as an ordinary wound. He used silk or catgut sutures, and passed them through the whole thickness of the wall of the abodomen; union invariably took place by first intention.

Dr. Fenwick agreed with the remarks of the last speaker. He always used silk sutures, and objected to horsehair, because knots made in it did not hold well. In treating the pedicle he first clamped it, and then tied all the large vessels; afterward, he tied the pedicle with the Staffordshire knot and removed the clamp. He had used hot water occasionally to cleanse the abdomen.

Dr Trenholme, in reply, said he spoke of interstitial fibroids. He formed the pedicle out of the labial borders of the uterus in such a way that he left the broad ligaments to sustain the pelvic viscera. He used the shoemaker's stitch to secure primary union. With regard to the external wound, he thought that the conditions found in the abdominal cavity existed nowhere else. It is of the greatest importance to secure primary union so that there shall be no subsequent hernia. For vomiting he used hot water over the wound, and ipecac in minute doses. In preparing the patient he avoided purgatives as much as possible. In cold he weather kept the extremities of the patient wrapped up in cotton-wool.

Dr. Shepherd, of Montreal, next read a paper on "Excision of the Tarsus in Tuberculous Disease of the Bone." He remarked that in cases of tuberculous and carious disease of the bones the necessity for amputation is not immediate, and it is the duty of the surgeon to endeavor first to remove the local disease before sacrificing the foot. The reader of the paper illustrated this principle by giving the histories of several cases. In one case, where there was disease of both feet, he removed on the right foot the cuneiform, scaphoid, cuboid, and bases of the metatarsal bones, and on the left, the lower end of the tibia, astragalus, part of the os calcis, the scaphoid, and cuboid. The result was excellent, and the patient, a girl aged seventeen, was able to walk about comfortably. In children amputation is hardly ever required.

Dr. Macfarlane believed this is the proper method of treatment and should be extended to caries of the spine. In dressing the wound left after excising tarsal bones he never stuffed the wounds with anything, but placed the foot in a good position and left the rest to nature.

Dr. Kerr, of Winnipeg, said that patients, after operation, should not be allowed to walk about too soon, as they are apt to have a splay foot.

Dr. Fenwick said he could mention a number of cases in which he had resected the tarsus with the happiest results. He related the case of a gentleman (a medical man) who had been wounded at the battle of Alma, and had carried the bullet in his heel for nearly thirty years. The os calcis was trephined, and the bullet removed, with result of a rapid closure of the cavity and a useful foot.

Dr. Kerr, of Winnipeg, read a paper on the

"Evacuation of an Abdominal Hydatid Cyst." The patient was an Icelander, who came into the Winnipeg Hospital last winter, with a large abdominal tumor. From the history, and as the result of exploratory puncture, the attending physician, Dr. Whiteford, made the diagnosis of hydatid cyst, and handed the case over to Dr. Kerr for operation. The operation was performed in two stages, as recommended by Volkmann. A cut was first made down to the growth, and six days after it was incised. To open the cyst he had to cut through two inches of the liver. The cyst was then emptied and washed out with a solution of iodide. The patient did well, and went home in two months. He remarked that these are rare cases. Up to 1880, only 155 cases have been reported. This is the second case that has been seen in the University Hospital. The other patient was operated on, but died on the table.

August 19th.

Dr. Kerr reported two cases of "Gunshot Wound of the Hip-joint."

Dr. Buller, of Montreal, read a paper on "The Treatment of Acute Purulent Ophthalmia."

Dr. Shepherd, of Montreal, read notes of a case of "Ainhum."

Dr. Fenwick, of Montreal, reported a case of "Amputation at the Shoulder-joint for Myelosarcoma of the Arm."

Dr. A. Lapthorn-Smith read a paper on "Alexander's Operation, and the Treatment of Displacement of the Uterus." After describing the operation minutely, and also giving a discourse on the anatomy of the parts, Dr. Smith went on to say that the round ligaments are really muscles, and are not in a state of tension except during coition. They are the homologues of the cremaster muscle in the male. Dr. Smith considered that the risks of the operation are great, and that it is not a justifiable one except in extreme cases, and when performed did not permanently cure displacements of the uterus. He prophesied that it would soon fall into disuse. The author said that displacements of the womb could be corrected by lessening congestion, by keeping the liver clear, and the lower bowel empty. The paper was illustrated by diagrams and tables.

Dr. Trenholme agreed with Dr. Smith that the operation was one that would soon be known only in history.

Dr. Shepherd had frequently dissected the round ligament, and had performed operations on the dead subject. The uterus could be easily elevated by pulling on the ligaments. He did not think the fact that a few muscular fibres had been found on the ligament proves that it is now in active use as a muscle; it is, rather, a fœtal remnant of the ligament of the Wolffian body, and the homologue of the gubernaculum testis of the male.

Dr. Ahern, of Quebec, said that the round ligament is frequently abnormal, and that at its insertion it is often much atrophied. In cases where the uterus is fixed, tightening it will not correct displacements.

The section then adjourned.

A General Meeting of the Association took place at 2 o'clock, Dr. Canniff in the chair, as the President was absent.

Dr. McEachren, the Principal of the Veterinary College, gave an address on "The Pleuro-pneumonia of Cattle," which was illustrated by pathological specimens. The principal difference between pleuro-pneumonia in cattle and that of man is that in the former the disease is first, and essentially, an inflammation of the inter-lobular connective tissue; the alveoli are only secondarily affected.

Votes of thanks were then given to the authorities of the Laval University for the use of the building, and to the railroad and steamboat companies for the courtesy shown by them to the Association.

The Association then adjourned.

Selected Articles.

OPHTHALMIA NEONATORUM.

Dr. J. E. Weeks writes, in the *Medical Record*, on ophthalmia neonatorum, that the plan of treating this affection he has found most rational is as follows, for the careful carrying out of which a trained nurse or a careful attendant is essential:

If only one eye is attacked, the well eye must be carefully guarded against the possibility of infection from the diseased eye. This is done by cleansing both eyes frequently with absorbent cotton or clean sponges, and clean, cool water, weak solutions of sublimate, boracic acid, etc. Sealing the eye in infants is very unsatisfactory; it may be done with benefit in adults. *Constant* cold applications to the lids should be made. I find the following method most efficient: Pieces of linen, twelve or eighteen in number, are folded into three layers, so as to form squares of an inch and a half. These squares are dampened and spread on a cake of ice. The nurse in attendance changes the pieces of linen to and from the eye sufficiently often to have a cold piece *always* resting on the lids. These applications are kept up *constantly* until the swelling of the lids subsides, and until the discharge has almost entirely ceased, usually from three to seven days. The plan of making the cold applications at intervals of two or more hours is certainly not advisable in these cases, as the temperature of the lids rises as soon as the cold is removed, and the development of any living germ in the tissue of the conjunctiva is resumed. I have witnessed the increase of inflam-

matory action in cases of this kind when the intermittent plan was followed. The secretion is removed from the conjunctiva by careful washing with cold or cool water, a clean sponge or absorbent cotton, usually every twenty or thirty minutes —more or less frequently according as the secretion is more or less profuse.

In these conditions applications of a one to two-per-cent solution of nitrate of silver are made to the surface of the conjunctiva every morning and evening, care being taken not to make the solution sufficiently strong to cause an increase in the inflammation of the lids when it is applied. The applications are made in the following manner: The lids are everted, and the solution of silver is brushed upon the conjunctiva freely with a soft camel's hair brush. After the silver has remained in contact with the conjunctiva from fifteen to thirty seconds, it is washed off with a very weak solution of sodium chloride or simple water.

The above-mentioned applications may be made in all stages of the disease, without regard to the condition of the cornea. If corneal ulcers exist, one or two drops of a one-per-cent. solution of the sulphate of atropine should be instilled between the lids two or three times a day. I find that the gonococci are present so long as the purulent discharge continues.

If the above plan of treatment be carefully carried out, I am confident that no eye need be lost by any form of gonorrheal ophthalmia, if the treatment is commenced before the cornea becomes involved, and that corneal complications will be very rare. In nearly every case the progress of the disease will be arrested from the moment that treatment is begun. Canthotomy, Critchett's operation of a perpendicular incision through the middle of the upper lid, or scarification, I deem harmful and entirely unnecessary.

INGLUVIN.

A very learned name for a remedy is Ingluvin. It is the essential principle of the gizzard, and bears the same relation to poultry that pepsin does to the higher animals. The honor of its discovery and utilization, in its crude state, remotely dates with the Chinese gastronomer, as well as to the Caucasian chemist, in its refined condition. From time immemorial the inhabitants of the Celestial Empire have used the gizzard of chickens and ducks in nearly all made dishes. Their writers have recommended the practice as a sovereign treatment of dyspepsia, weak stomach and vomiting. A favorite prescription of Chinese physicians for chronic indigestion is to cut up and digest chicken gizzards in hot water until they are reduced to a pulp, and then add some spices. A tablespoonful or two of the resulting paste is taken at each meal until the patient has entirely recovered. From China the practice passed to other parts of Asia, and was adopted here and there among the Mediterranean peoples. Strange to say it was never learned by the great nations of Europe until the latter part of the present century. On the other hand, the organic chemists of Europe discovered, about 1850, a powerful nitrogenous radical in the gizzard. Experiments thereafter showed it to possess many of the qualities of pepsin. These experiments led to its isolation. Numberless experiments have proven it to be a very valuable addition to therapeutics. Where pepsin refuses to act, and where, in severe cases it has even been rejected by the stomach, Ingluvin effected relief rapidly and with the greatest ease. In four recent cases of poisoning by root beer (Brooklyn, June, 1886), Dr. George Everson, Jr., a well known physician of that city, reports that after pepsin and all similar compounds had been rejected by the stomachs of his patients, Ingluvin stayed the retching and enabled them to retain and digest food. Dr. Lassing reports a similar experience in several cases of acute dyspepsia. *A priori*, it would seem as if Ingluvin should be more efficient and potent than pepsin in many cases of physical disorder. Our poultry are chiefly gramnivores and have no beak nor other buccal apparatus for crushing the hard grain and seeds on which they so largely feed. The food is swallowed when apprehended and passes directly into the crop or gizzard. This seems to act both mechanically and chemically. Its interior walls are covered by a dense, hard cultous membrane, surrounded by muscles of the most powerful type. Along with the food is always a small amount of sand and gravel. The organ acts apparently by bruising and cracking, rather, than is commonly believed, by trituration. The motion of the ingluvial muscles is accompanied by a slow but continuous exudation, from the walls of the crop, of a strong organic fluid, of which Ingluvin is the chief constituent. The hull of the grain or the shell of the seed is broken by the pressure of the walls and the gravel and their interior is exposed to the chemical action of the ingluvin. By the time it reaches the stomach it is ready for the gastric juices. From this point on, digestion proceeds as with the higher animals. As the gallinaceæ have very small salivary glands, and as the fluids secreted by these resemble the secretion of the parotid rather than that of the sublingual and submaxillary glands of the human being, it would seem as if Ingluvin played a double part, exercising the functions of the ptyalin of the saliva as well as the pepsin of the stomach. Ingluvin is prepared by the far-seeing chemists, Wm. R. Warner & Co., of Philadelphia. It is made from selected gizzards, and is so carefully extracted as to be free from all foreign organic bodies. It is already known and appreciated by the medical

profession. The AMERICAN ANALYST bespeaks for it the same appreciation by its readers. We extract the following:

Prof. Roberts Bartholow, M. A., M. D., LL. D., in his late work on "Materia Medica and Therapeutics," says:—INGLUVIN. This is a preparation from the gizzard of the domestic chicken—*ventriculus callosus gallinaceus*. Dose, gr. v.—℈j.

Ingluvin has the remarkable property of arresting certain kinds of vomiting—notably the *vomiting of pregnancy*. It is a stomach tonic, and relieves *indigestion, flatulence* and *dyspepsia*. The author's experience is confirmatory of the statements which have been put forth regarding the exceptional power of this agent to arrest the vomiting of pregnancy. It can be administered in inflammatory conditions of the mucous membrane, as it has no irritant effect. Under ordinary circumstances, and when the object of its administration is to promote the digestive function, it should be administered after meals. When the object is to arrest the vomiting of pregnancy, it should be given before meals.—*From the American Analyst, August 1st, 1886.*

HYDRONAPHTHOL.—Dr. Justus Wolff asserts that E. Merck's statement that betanaphthol and hydronaphthol are identical is a mistake, which may result in the most serious consequences if betanaphthol be used instead of hydronaphthol, "as the first one is a most dangerous and deadly poison whilst the latter is an excellent absolutely reliable and harmless antiseptic." The poisonous character of betanaphthol has been established a long time ago by such authorities as Kaposi, Neisser and Piffard, and lately by Max Schwarz, while Dr. G. R. Fowler, Dr. Lawrence Wolff and many others, have proved hydronaphthol to be non-poisonous, and a most effective antiseptic. Hydronaphthol is distinguished from batanaphthol not only by its physiological action but also by distinct chemical reactions and by its chemical constitution, as it possesses certainly more hydrogen in the molecule than betanaphthol. Of the several distinguishing chemical reactions the following may be given as an example: If from a diluted iron-perchloride solution two drops are added to an alcoholic betanaphthol solution it becomes of a bright green color, whilst the same proportion of an alcoholic hydronaphthol solution of the same strength becomes dark yellowish brown by addition of the same proportion of iron-perchloride solution. Other reactions are also different and the melting points obtained by most careful determinations are for hydronaphthol 117° C., and for betanaphthol 122° C. These and other facts satisfy the author that hydronaphthol is distinct from the poisonous compound which is known as betanaphthol and that it is not alphanaphthol nor a mixture of the two last named and does not contain any of either.—*Druggist's Circular.*

THE TREATMENT OF GLEET.—In an address before the Medical Society of the County of Albany, Dr. O. D. Ball described a method of treatment employed by him successfully in a number of cases of chronic specific urethritis (*Albany Med. Annals* June, 1886). He employs an ointment composed of oxide of zinc, three drachms; lard three drachms; cerate, two drachms. The application is made by means of an olive-pointed bougie. The constricted portion of the bougie is filled out evenly and as smoothly as possible with the full calibre of the instrument. The bougie should be carried down to the prostatic portion of the urethra as rapidly as possible, and then, after being rotated in both directions, slightly withdrawn and pushed back again, in the hope that some of the ointment will be forced into the swollen mouths of the seminal and prostatic ducts. In the same manner the remaining portion of the urethra should be treated, giving plenty of time for the ointment to be melted and left in contact with the diseased membrane. The patient should have emptied his bladder previous to the application, and should be instructed to refrain from doing so again as long as possible. The applications should be made at least twice a day—in the morning and the last thing before retiring. The instrument should not be too large, but of just sufficient size to smooth out the folds of mucous membrane. For instance, when the penis measures three and a half inches in circumference, a No 20 French will about answer the purpose. The average time of treatment of all the cases was a little over four weeks. The longest any one case was under treatment was eight weeks; the shortest was ten days, except in one case where the patient never saw any discharge after the first application was made.

CONGENITAL MALFORMATION OF THE INTESTINES.—Dr. Owen Pritchard reports the following case in *The Lancet* of May 15, 1886: The child (a female) looked quite healthy at birth, except that the abdomen was unusually distended, and on his visit in the evening the nurse drew Dr. Pritchard's attention to the large size of the abdomen, and stated that the child had been very sick. A teaspoonful of castor-oil was ordered, but at the next visit it was found that it had not operated, and that the sickness was getting much worse, the vomit becoming black and offensive. An injection was tried, but it succeeded in bringing away only a few very small lumps of fæces. The vomiting became more and more severe, and the child died at the end of a little over four days. At the post-mortem examination the stomach was found normal, and the small intestine for about three feet was also normal, but here it ended in a blind extremity which was greatly distended. Then, quite separate from all this, and not attached to it in any way, were coils of very small intestine several

feet in length, and not measuring more than a sixth or an eighth of an inch in diameter. This passed on into the right iliac fossa, and there forming the ileo-cæcal valve, it continued in the course of the large intestine on to the rectum, its diameter in any part of its course not measuring more than a sixth of an inch.

Sulphate of Sparteine as a Dynamic Medicament and Regulator of the Heart.—M. Germain Sée reports three constant effects as resulting in his experience from the use of this medicament.

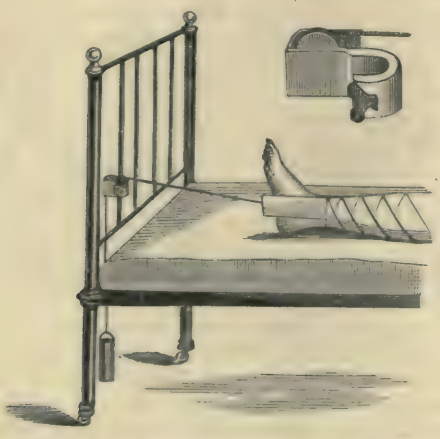
1. The strengthening of the heart and pulse, more persistently and effectually than digitalis and convallaria.

2. The immediate regulation of the disturbed heart rhythm, in which it is surpassed in efficacy by no other medicament.

3. The acceleration of the heart-stroke in cases of severe atony accompanied with excitement, similar to the action of belladonna. The influence manifests itself immediately after the exhibition of the remedy, and lasts for three or four days. During this time the general strength increases, and the breathing is essentially lightened more certainly than by iodide of potassium.

The agent seems not to exert any favorable influence upon the secretion of urine. It is especially indicated in cases of disease of the heart muscle.—*L'Union Medical.*

Extension Pulley.—The accompanying illustration depicts an extension pulley which I have had made, and which is used at the Cork Children's Hospital, to the exclusion of nearly all the old extension arrangements. By means of the



side screw it is easily attachable to any ordinary bedstead, and can be raised or lowered at pleasure, so that a pull can be had from any direction. Messrs. Arnold & Sons, West Smithfield, have arranged to manufacture these pulleys.—*Dr. N. Grattan in Lancet.*

Medical Notes.—

Prof. Bartholow directed, for a case of *chorea*, in a boy of twelve, extract gelsemii fluid, ♏iij ter die, and Fowler's solution, ♏iij ter die.

For the alleviation of *hepatic cancer*, Prof. Bartholow prescribes syrupus mangani et ferri iodidi, and minute doses of Donovan's solution. Patient is to avoid starchy, fatty and saccharine food.

Prof Brinton has, for many years, treated, with excellent results, *pruritus ani* with teucrium scordium, in gr. xv–xx doses, ter tie, in water. It is to be used for four or five days, until effects are produced.

At Prof. Da Costa's clinic recently was a very marked case of *hysteria*, the patient suffering from hyperæsthesia of the skin, trembling paralysis and "fits." Treatment: Strengthen patient's *morale* and encourage her; have her exercise short of fatigue; plenty of good food and rest in bed, and let her take zinci valerianas, gr. ij, ter die. In eleven days she returned practically cured.

Prof. Bartholow remarked, in regard to the treatment of a woman suffering with *epilepsy*, of both the *grand* and *petit mal* types, that regulation of the diet is a most important point of treatment; do not overload the stomach with anything, not even water; allow no saccharine and very little starchy food; meat in small amounts only once a day. For the convulsive phenomena, sodium bromide, ʒj morning and evening for the first week, then diminish one-half.

For *vertigo with deafness*, not true Ménière's disease, Prof. Bartholow advised at least five grains of quinine ter die, to be taken for one week and then suspended to ascertain the result.

For *acute rhinitis* in its incipient stages, of all the remedies tried by Dr. Sajous, the following has given the best results. In the doctors words, "It acts like magic":—

℞. Morphinæ acetat., ... gr. iv.
Bismuthi subnit.,
Pulv. talc., . āā . . . ʒ j. M.
Fiant chartæ, xxx.
Sig.—Use as a snuff.

Dr. Sajous states that this will check a very bad *cold*, or coryza, sometimes with only one sniff of the powder.

Prof. Bartholow's treatment for a bad case of *melancholia*, with illusions of sight and sound, occurring in a lady æt. 49, was: Free purgation; to stimulate the circulation and the functions of the brain, tinct. opii deodorata, gtt. v, four or five times a day, also a moderate amount of alcohol given as a food and with the food; but great care must be taken to prevent the formation of the alcohol habit, which is easily done in such cases.

If possible the patient should have a change of air and circumstances; a sea voyage would be very beneficial; exercise and plenty of good nourishing diet must be carefully seen to and all sources of mental depression avoided.

At Prof Bartholow's clinic a man presented himself very deeply *jaundiced;* had been so for four weeks; previous to that had had quotidian intermittent; had dyed his hair for years; as the metals are excreted by the liver, that organ may have been damaged by the lead contained in the dye. For the jaundice, a mild saline cathartic is the best agent, such as sodii phosphas, ʒ j, ter die. Keep the kidneys active, to get rid of the bile pigment in the blood. This patient will also take quininæ sulph., gr. v. ter die. When the jaundice is removed, potassium iodide, for removing the lead from the system.—*Col. and Clin. Record.*

Bromide of Potassium and Lotions of Ether for Sunstroke.—The purpose of this note at this time is to call attention to the great value of bromide of potassium in this affection by the mouth when it will be so taken, and by the rectum when the patient cannot be induced to swallow it. It brings about more speedily, in the gravest cases, the return of the patient to himself mentally, and averts the serious brain sequelæ immediate, and remote, of this always serious affection. The acute insanity of sunstroke much sooner subsides under its use than from the cold treatment alone, and the cold treatment ought to be suspended as soon as the patient comes to himself, appears drowsy, and feels chilly.

Many lives are lost, I am satisfied, and many preventable cases of chronic cerebral meningitis and insanity follow the neglect to use bromide of potassium freely during the active treatment stage, and moderately after the patient has recovered.

My plan is to give from sixty to one hundred and twenty grains during the first hour, and sixty grains every hour, or thirty grains every half-hour, largely diluted in peppermint-water; sulphuric ether freely to the head and spine and fanned away until six ounces are used; ice at the same time to arms, wrists, abdomen, over the heart, legs, etc, and, in extreme cases of comatose collapse, ice cold water into the bowels with ginger and capsicum, but ordinarily cold water with two hundred grains of bromide of potassium.

A recent violent case, July 5th, with maniacal delirium, fear of being murdered, and requiring six men to hold him down, was subdued, as all my previous cases have been, by the free use of bromide of potassium, ice and ether, passing into a tranquil sleep with soft and regular pulse and respiration within three hours after the beginning of the attack.

The man was a labourer, struck while at work in the street. He had drunk some that morning and more the night before, but was not intoxicated. He was thirty years old, and married.

The patient took altogether two hundred and forty grains during the first twenty-four hours, and will take two hundred and forty more at the rate of ninety grains a day, before treatment is discontinued.

As we allowed some ginger-ale when he began to complain of being cold, and ice removed and dry clothes put on him.

The remote consequences of sunstroke are very serious in various chronic forms of head trouble, especially in insanity, and few persons who have once had a sunstroke can ever after tolerate heat. The chief and greatest value of the bromide of potassium treatment, at the time of the attack, is in averting these consequences.

Of course, atropine and iodide of potassium are not to be disparaged, and may be blended with the bromide treatment. And muriate of ammonia and aromatic spirits of ammonia may immediately follow it.—*Ex.*

Tinnitus Aurium in Affections of the Stomach.—Ménière's opinion here given is opposed to that of most otologists, that subjective noises in the ears are always premonitory of a diminution or loss of hearing. He believes that the tinnitus occurring in patients suffering from dyspepsia arises in the internal ear, and is of varied character, but the noises are never isochronous with the pulse. After examining a large number of cases, he comes to the conclusion that one may become deaf by way of the stomach. The diagnosis is rendered more exact by the absence of lesions of the external or middle ear. The tinnitus may appear before any of the symptoms of disease of the stomach, though it usually occurs during the second or third year of the gastric lesion. It generally affects but one ear, but it may affect both ears. The deafness is variable. The diminution or augmentation of the tinnitus usually follows the descending or ascending course of the dyspeptic lesion. Local treatment gives but barren results, though Ménière claims to have seen some good results from static electricity.—*N. Y. Med. Jour.*

Constipation.—There is always something to be learned about this exceedingly common and annoying complaint. Dr. Arthur V. Meigs recently related the histories of seven interesting cases before the College of Physicians, which teach several valuable lessons. They warn us never to diagnose an abdominal tumor until we have purged the patient. They teach us that constipation can cause a fever which the best of us may be misled into considering as typhoid. Again, as Dr. Da Costa said, constipation may cause a relapse in convalescence from low fevers, and he even says that in some of these cases there may be well-developed

typhoid fever symptoms with rash, due to constipation, which will disappear when the bowels are moved. So that, on the whole, it would seem to be very important to look carefully after our patients' bowels in all cases.—*Medical and Surgical Reporter.*

Wonderful Operation.—We learn by an account in a recent issue of the *N. Y. World* that another rare and wonderful operation has been performed with brilliant results. This time it was a very painful cancer, situated in the dangerous locality of the breast. The skilful surgeon at the hospital was willing, however, to take all risks to save the life of the patient. The incisions were carefully and judiciously made "in the direction of the fibres of the great pectoral muscle," the slightest deviation of the blade inviting death. The knife was carried "round the diseased mass in such a manner as to include *every part of it*, the lower incision being made first." The pectoral muscle was "thoroughly exposed by the removal of its fibrous envelope." "Strict antiseptic precautions" were observed, and, *mirabile dictu*, the wound "healed by first intention," without any increase in the temperature. All this shows what advances are constantly being made in our noble art by bold and skilful surgeons. We hope, however, that success will not make some of our operators too bold. Who will be the first one to tackle "a wen?"—*Med. Rec.*

Morphiomania in France.—M. le Prof. Ball, the celebrated alienist of St. Anne, dedicated a special article in the *Journal de Medecine* to morphiomania, which is, according to him, assuming great proportions in France, especially amongst the gentler sex. The symptoms are very characteristic, but often the patient tries to put the medical attendant off the scent, and then some difficulty in the diagnosis is experienced, but if a close observation is made something unnatural in the conduct of the person will arouse suspicion. For instance, if he is in a meeting his face will become changed and downcast, and he takes no longer interest in what is passing around him; but if he gets an opportunity of absenting himself a few minutes he will return quite bright as before; for in that short interval he has given himself an injection. However, there are two sure signs which will betray the patient, no matter how he may try to conceal his habit, and those are to be found in the skin and in the urine. The skin will be found to be covered with little dark spots situated in the centre of little indurations about the size of a large shot. It is needless to add that these indurations are the result of the little wound of the needle, but as the lesions are generally found on the inside of the thighs the patient refuses to let them be seen, and in that case examination of the urine will prove of great service. A few drops of the tincture of iron are put into the suspected liquid, and if morphia be present a blue tinge will be produced. The prognostic of morphicmania is not as fatal as is generally supposed, but there is danger, from the fact that the dose has to be continually increased, and in the end the cachexia becomes so pronounced that the patient falls an easy prey to tuberculosis. As to the treatment, M. Ball recommends a *brusque* suppression of the drug, provided the patient can be well watched, but in private practice he thought that it would be found necessary to proceed gradually. Preparations of belladona might be employed to calm the irritation, or cocaine, but this latter remedy might prove to be as bad as the evil it was given to cure.—*The Med. Press.*

Pruritus, Etc.—*Boro-Glyceride.*—I have found boro-glyceride a successful remedy in several cases of troublesome pruritus. In anal and pudendal itching, common in gouty and diabetic patients, it has afforded relief when other means have failed. It may be used diluted with water, one to three or four, or in severe cases pure. It is not commonly known that borax preparations are much more soothing and sedative to tender and abraded mucous surfaces than chlorate of potassium, which is, locally, somewhat of an irritant. Glycerine is itself a penetrating and sometimes an irritating application. The chemical compound boro-glyceride seems to be free from this objection, which is not the case with glycerinum boracis. In a case of sore tongue occurring in association with severe chronic pemphigus, glycerine of borax was found temporarily the more grateful of the two, keeping the mouth more moist than did equal parts of the boro-glyceride and water, but the latter seemed to have more healing effect. Honey of borax seems less irritating than the glycerine preparation. A lotion of boro-glyceride, two per cent. strength, was found of much value in a very obstinate case of cystitis, which yielded to no kind of treatment by diet and commonly approved drugs. My colleague, Mr. Marsh, at my request, began local treatment by washing out the bladder. There was great sensitiveness, and only two drachms of fluid could at first be tolerated in the viscus. This was gradually overcome by the preliminary use of a four per cent. solution of cocaine, and thus the bladder was regularly washed out, at first every two days, then daily, then twice daily. Great improvement resulted in about six weeks. This is probably the best method of treatment for such cases of cystitis as do not soon yield to ordinary means.—*St. Bartholomew's Hosp. Rep.*

Hæmoptysis, Profuse. — *Treatment.*—At the Medical Society of London, on Dec. 14th, Dr. West read a paper on this subject, in which the

following principles were discussed 1. Rest of the body generally and of the diseased part. Many of the indications under this heading were to be met by the use of opium. 2. Hemostatics: (*a*) Topical astringents; (*b*) vascular constringents. Topical astringents could not be applied to the bleeding part of the lung, and if they acted at all it must be only as vascular constringents. The belief as to the use of vascular constringents in pulmonary hemorrhage was probably based upon an incorrect theory of the pathology, and reasons were adduced why they could not be expected to do good. Ergot was of doubtful value, for it constricted vessels smaller than those from which the hemorrhage came. The risk of death in profuse hæmoptysis was more from suffocation than mere loss of blood. Moreover, profuse hemorrhage tended to bring about of itself the conditions most favorable to its cessation. An attempt might be made to imitate these conditions in treatment. When a vessel was divided, hemorrhage ceased (1) from contraction of the vessel, and (2) from clotting of the blood, aided by the great fall of blood-pressure which severe hemorrhage induced. In hæmoptysis the vessel was so diseased that it could not contract at the diseased spot. There was no drug which by internal administration could increase the clotting power of the blood. The effect upon the blood-pressure could be imitated in various ways:—First, by free bloodletting from artery or vein. If bloodletting be inapplicable, the same end might be aimed at by detaining the blood in some part of the body other than the diseased part. This could be done by mechanical means, as by the use of Junod's boot, or by dilating some of the great vascular systems of the body and making them act as temporary reservoirs for the blood. The abdominal reservoir might be used temporarily by purgation; the cutaneous vessels by counter-irritation, or possibly by pilocarpine and nitrite of amyl; these drugs dilate the vessels throughout the whole body, and might possibly be of great service. The blood-pressure might be further influenced through the heart—by means of cardiac depressants, of which antimony is the most reliable; by nauseant emetics, of which ipecacuanha was much vaunted by Trousseau. Lastly, dieting was of great importance. The principle of absolute rest with a restricted diet, which is the essence of Tuffnell's treatment for aneurism of the thorax and abdomen, was equally applicable and useful in pulmonary hæmoptysis. Dr. Symes Thompson considered that in a great number of cases good resulted from free hemorrhage. He did not believe in the use of astringents, such as gallic acid, copper, and lead salts. Careful management with free purgation was far better treatment. Opium was useful when restlessness and excitement existed. Clinical experience went to show that even bleeding from aneurisms in the pulmonary artery was controllable.—*Lancet.*

Carbolic Treatment of Hemorrhoids.—The strength of the solution must be regulated by the nature of the case, and in my own practice varies from five per cent. to pure crystallized acid. In a large vascular, prolapsing tumor, which is well defined and somewhat pedunculated, five drops of pure acid may be used with the expectation of producing a circumscribed slough which will result in a radical cure. A thirty-three per cent. solution under the same conditions will probably produce consolidation and shrinkage without a slough, but the injections will have to be repeated several times. A small tumor, which protrudes but slightly, is not pedunculated, and can be seen and felt as a mere prominence on the mucous membrane, may be cured by a single injection of a five per cent. solution, which will cause it to become hard and decidedly reduce its size, while an injection of a fifty per cent. solution might make considerable trouble, the remedy being too powerful for the disease. Guided by this principle, some experience will soon determine the choice of the solution. There is no arbitrary rule which can be applied to every case. As in any other surgical operation, some cases will be more satisfactory than others, and an occasional accident must be expected; but, on the whole, it seems to be the best method of treatment yet devised.—*N. Y. Medical Journal.*

Catarrh.—*Treatment on a Neurotic Plan.*—My plan of treatment for the arrest of catarrh is as follows: I keep a strong solution of bromide (1 in 3) and a bottle of tincture of belladonna (B.P.). When I am conscious of having taken cold, I take two to three drachms of the bromide solution in a small glass of water—that is to say, 40 to 60 grains of bromide. I repeat this dose in six hours, and, if necessary, take a third dose at a similar interval. Meanwhile, as soon as a flux commences, I take twenty drops (equivalent to fifteen minims) of the tincture of belladonna in a little water every hour or two until the throat feels somewhat dry. The painting of the nasal mucous membrane with cocaine solution gives great relief, and powerfully contributes to the cure if the catarrh be severe. Since I hit upon this plan, I have never failed rapidly to arrest my own catarrhs, nor have I failed in any instance in which I have myself been able to superintend the administration of the remedies.—*Dr. Lees.*

Warm Ether as an Anæsthetic.—Dr. M. W. Hobbs writes in the Cincinnati *Lancet-Clinic* of May 8, 1886, concerning the advantage of warming ether previous to its administration in the production of anæsthesia. He uses a special form

of inhaler, in which the ether is warmed by being placed in a chamber surrounded by hot water, and the vapor is mixed with a certain proportion of air before being inhaled He finds that anæsthesia is produced more rapidly and with the expenditure of less ether, than when the agent is used cold. He and Dr. Taylor have tried the method in upwards of thirty cases, and he writes that the patients not only came under the influence of the drug more readily, but they also recovered more rapidly and pleasantly from the anæsthesia, than patients generally do who have been brought under its influence in the ordinary way of administering ether cold.

Medical Cure of Glaucoma.—M. Panas recently submitted to the Paris Academy of Medicine a communication on the treatment of certain forms of glaucoma without operation. In the view of M. Panas, the myotics hitherto employed as palliatives may also play the roll of curative agents; but to obtain favorable results their use ought to be prolonged. They should, in preference, be employed in the form of collyria. The two formulas usually employed by M. Panas are a solution of one twenty-sixth of a grain of sulphate of eserine to the dram of water, or one twelfth of a grain of nitrate of pilocarpine. The collyrium of eserine is always to be placed in the first rank.—*Le Progrés Medical.*

Alcoholic Delirium and Rabies.—Dr. Dujardin-Beaumetz (*Brit Med. Journal*) gives particulars of two supposed cases of rabies. In one case the patient had all the symptoms of alcoholic delirium, and tried to bite people; he had been bitten by a dog (not mad) 15 days before. He was cured in two days. Dr. Dujardin-Beaumetz said that he had never met with a person suffering from rabies who attempted to bite others, and he could confidently assert that this was a symtom of alcoholic delirium and not of rabies. The other case was admitted for rabies and tried to bite the male nurses; he was suffering from alcoholism as well as hydrophobia.

The Function of the Tonsils.—Dr. R. Hingston Fox, in an interesting article on the Functions of the Tonsils in the twentieth volume of the *Journal of Anatomy and Physiology*, expresses the opinion that these glands belong to the digestive and not the respiratory tract, and that their function is to reabsorb certain constitutents of the saliva in the intervals of meals which would otherwise be wasted. He thinks that the view of their having an absorbing function is further supported by the strong evidence of the power of the tonsils to absorb morbid poisons directly from the saliva. —*Lancet.*

Ringworm.—Ringworm of the most obstinate character may, according to Dr. Saerlis, writing in the Medicina Contemporanea of Lisbon, be cured in ten days by cutting the hair from the affected spot, pouring turpentine on it, letting it run over the whole head, and rubbing well with the finger. After this has caused a smarting sensation for from three to five minutes, it is washed off with carbolated soap. Hot water is then used for washing the whole head, and the affected spots touched with dilute tincture of iodine or with a 2 per cent. solution of iodine and turpentine. This process is to be repeated once or twice a day.—*Lancet.*

Eserine and Pilocarpine for Glaucoma.—It has been objected against eserine that it increases the intra-ocular pressure whilst contracting the pupil; pilocarpine, on the other hand, is said to lower the intra-ocular tension. These myotics have been set against one another in the treatment of some cases of glaucoma. Schlegel has made some experiments on the intra-ocular tension, and arrives at the conclusion that the alkaloid of jaborandi also increases the tension.—*Lancet.*

Hypodermic Solution of Quinine.—Where it is necessary to administer quinine subcutaneously, the following formula is recommended by Dr. S. Burt, as being as little irritating as possible:

℞—Quiniæ bisulphatis,	ʒj.
Acidi borici,	gr. ij.
Morphinæ sulphatis,	gr. ¼.
Aquæ distillatæ,	ʒj.

Sig.—For hypodermic use. One drachm contains seven and a half grains of quinine.

The *Hahnemannian Monthly* for July has an article on the Treatment of Moral Insanity; quite a number of drugs are mentioned, but the following appear to be the most important: for *kleptomania*, Ars.; for *cursing*, Nux.; for *inclination to murder*, Lach.; for *hatred of work*, Spongia, etc. We should think that Ars. and Nux., especially Ars., in pretty full doses, might be valuable in kleptomania and cursing. The external exhibition of Lach. in inclination to murder is of reputed value, but experiments made in Delaware scarcely prove it to be a specific. Spongia, either internally or externally, has not, in our experience, being of any permanent value in hatred of work, although we have seen many cases in which the external use of the remedy appeared to be strongly indicated. We note with pain that Hell. is recommended for mental derangement from alcoholic liquors.—*N. Y. Med. Abs.*

They are wonderful people out at St. Joseph, Mo. A writer to the *Medical Brief* says they have a fine boy there, whose mother, at his birth, was sixty-five, and father seventy-one years old!

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet, Toronto."*

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, OCTOBER, 1886.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

FAITH CURES.

Alleged Faith Cures have recently acquired some celebrity, through the medium of the press. Many are the wonderful recoveries from various incurable disorders, said to have been caused by faith and prayer. This system, if we may so term it without impiety, has obtained not a few disciples, and many converts, in the United States and Canada. Whether from its merits, or from its supernatural claims, is a question upon which there can be little doubt. The mystery surrounding those alleged cures, and the astonishing results claimed, challenge attention, and elicit wonder and admiration from the credulous and superstitious.

That the mental exerts no inconsiderable power over the physical, cannot be successfully disputed. The mind continually influences the various functions of the body. Nervous activity is hourly affected by the various thoughts, emotions, and conditions of the mind. Through this mental influence on the nervous system, physiological and pathological action is excited or depressed. Consequently, results are produced on the devotee, which, although strictly in accordance with physiological laws, are hailed as miraculous by many. That the faithful believe in every instance, that the universal laws of nature are suspended or reversed, for their especial benefit, by the Author of nature, in no way changes the fact, that if benefited at all, it is by natural laws solely. The fact that science has not yet arrived at the knowledge whereby these laws affecting the nervous system, and the intimate relationship of mind and matter can be clearly enunciated, is no evidence of the violation of these laws in any instance, but merely proof of our want of information concerning them.

Faith cures, so-called, are older than history. From time immemorial, uncivilized humanity has appealed to their various gods, whether ideal or material, for relief from pain and sickness, and when restored to health, sacrificed to, and praised the god whom they confidently believed had cured them. Even among civilized nations the same is done, only in different forms, down even to the present day. Witness the shrines of Europe, with their hosts of pilgrims and worshippers. All will remember the many reputed cures effected at Knock in Ireland, and in various other places, on this continent as well as in Europe. Don Pedro's mother, the Empress, was devoted to a miraculous image of the Virgin, which performed cures. The image was at last offended by being carried to the Empress, who was too ill to be carried to it, which not only allowed her Imperial Highness to die, but killed the Archbishop, who permitted such sacrilege. There is just enough truth in faith cure, to propagate credence in the preposterous claims of its advocates. Were these claims investigated by competent observers, and the few facts sifted from the masses of error, the cures would be greatly reduced, in both number and quality.

It is not improbable that some neurotic individuals, by self-abandonment, and devoted concentration of mind upon the Deity, have been cured of some neuralgic or functional trouble; but we have yet to hear of any organic disease, properly authenticated, having been cured by such means. Now it is obvious that miraculous power must be unlimited, and therefore organic disease should be as amenable to Providential influence as functional or nervous diseases.

Again, were the cures as miraculous as alleged, time would not be a factor, nor would any partial cures occur. Many are reported as being greatly benefited, although not wholly cured. Nature and sublunary remedies require time to effect cures, and frequently do not wholly restore to pristine health and vigor. But surely *Infinite Power* would neither require time, nor specific

of inhal-
locality, nor would Providence leave his work half done.

A lady of our acquaintance, with cancer of the throat, visited a faith cure institution in Maine, U. S. After remaining there some weeks, she returned, professing to be greatly benefited. But the cancer pursued its natural course, and caused her death in a few months. Doubtless this and other similar cases are published as benefited, if not wholly cured.

Were the lists of failures, and the percentage of subsequent relapses or deaths, in those professing to be benefited by this system, published, as well as the alleged cures, the public would have some data upon which to form an unbiassed opinion. But their system of recording the so-called successes only, evinces a lack of candor, which throws suspicion upon the integrity of its leading lights, and hints at some relationship with Mammon.

Another source of illusion arises from coincidences. We all know that the natural powers frequently overcome even organic diseases, and when this occurs subsequent to the faith-treatment, it is heralded abroad as a miracle.

Were the advocates of this method of cure entirely confident of its infallibility, and humanely desirous of benefiting poor suffering mankind, both physically and morally, they would court investigation, and seek to inspire the necessary faith in all, by producing evidence which could not be doubted. We are aware that they claim to cure cancers, tumors, fractures, and all other diseases, organic or inorganic. But so long as they decline scientific investigation, or refuse to put their claims to the test of examination by any or all who may desire to be convinced of their truth, or error, they must expect to be classed either as fanatics or charlatans, by all "who can render a reason for the faith that is in them."

While we freely admit the just claims of religion, and its beneficial effects on the mind of man, we hold with Epicurus, "That those are not undevout who deny the gods of the many, but those who attribute to the gods the opinions of the many."

M. Polaillon recently showed a fork, $8\frac{1}{4}$ inches long, which he removed from the stomach of a juggler who had swallowed it by mistake. The stomach was opened at the level of the 9th rib.

INFECTION FROM ASSOCIATION WITH TUBERCULOUS PERSONS.

This matter is one of profound importance. Since the discovery of the tubercle bacillus, and its recognition by the profession as the specific cause of tuberculosis, we have something tangible to look to, as regards the communication of the disease by infection. The idea that tubercle is capable of inoculation was entertained by Laennec, as well as by many ancient writers. Laennec indeed believed he had himself been inoculated, by being wounded with a saw when performing a post mortem on the body of a patient who had died of phthisis.

From a number of cases investigated by Dr. Hanot of Paris, it would appear that, tubercular matter inoculated into the skin, produces an ulcer which runs a specific course, and is not amenable to the ordinary lines of treatment, but whether such skin inoculation produces pulmonary tuberculosis is not so clearly shown. One of the cases under observation would seem to point that way.

Now the general opinion, among the laity, and even among not a few of the profession is that consumption is not contagious, and that close intercourse with one, the subject of the disease is not attended by any danger of contracting it. Thus one member of a family, has no hesitation in nursing another member ill with the disease, even sleeping in the same bed, and thus breathing the same air. Nurses are constantly in close attendance upon patients, without even thinking they are in danger of infection, eating from the same dishes, with the same spoons even, and in many different ways exposing themselves to the risk of contracting the disease. Not a few instances have been recorded in which the husband or wife has been infected through sexual intercourse, as also through the air inspired having been rendered infectious by having passed into the lungs of the affected person.

If we believe that Koch's bacillus, introduced into the system sets up the tubercular process, we can surely see that close association with a person who is tuberculous and must therefore, at some stage of the disease at least, have numerous bacilli in his system, whenever the tuberculous process is going on, will necessarily involve a certain risk of the transmission of these micro-organisms to the healthy system, and that under favorable circum-

stances they will begin their deadly work. We say advisedly, under certain circumstances, for instances are innumerable in which, though the transmission must have occurred no evil results have followed. These circumstances may be either a hereditary tendency to scrofulous or tuberculous inflammations, a generally weakened state of the system by which it is unable to throw off the materies morbi, or various other states which will readily suggest themselves.

Now how may the bacilli find admission to the healthy system. Evidently either through air inspired, by the food, or any utensil put into the mouth which may convey them, through the genito-urinary tracts, or through wounds of the external surface. As to the first means of transmission; not only may the air actually expired from the tuberculous lungs be the carrier of the bacilli, but the sputa from such lungs, when dried upon a handkerchief, in a vessel, or on the floor must set free numbers of them to float in the air, and be sucked into the lungs of those inhabiting the same room. It is easy to understand how the food and eating-utensils may become carriers of the bacilli, and as to their introduction through wounds of the surface, the same may be readily appreciated. Indeed in one of the cases mentioned, (Hanot's) inoculation occurred from pricking the hand by a piece of broken porcelain spittoon which had been used by a phthisical patient; and in four of the cases observed, bacilli were found in the skin lesion, thus demonstrating its tubercular nature.

What then is the physician's duty as to advice given to those exposed to these various sources of contagion? Complete isolation of persons suffering from tuberculosis is practically impossible, so that nurses and others must take their chances, with this important reservation; that those whom the physician has reason to suppose are specially liable to contract the disease should be warned of the danger in which they are placed by close association with such patients. The insistence upon cessation of marital relations between husband and wife, when one spouse is known to be tuberculous, is almost impossible, and indeed, the number of cases recorded in which inoculation has occurred from sexual intercourse, is perhaps too small to warrant the physician insisting upon such abstinence, except in particular cases. But as to contracting the disease from the food or eating utensils, the physician's duty is plain. All persons in relation with the patient should be thoroughly impressed with the idea that they *may* become infected in this manner, and due caution should be insisted upon as to the cleansing of all dishes, spoons, etc., used by the patient, before being allowed to go into general use. Fortunately Koch's bacillus is not proof against boiling water. So that with care this source of infection may be eliminated. As to their introduction into wounds, the physician should be on the alert, for there is always a chance of the bacilli from the tubercle in the skin generalizing itself, and setting up its morbid effects in remote organs. Therefore early and complete excision of the tubercle should be insisted upon, or it should be destroyed by the actual cautery. An important matter here presents itself, viz.: the employment of children's nurses who are tuberculous. The isolation of patients, separation of husband and wife, etc., which have been referred to above, are difficult if not impossible, but it is easy to educate the public not to employ nurses who are affected. The intimate relation between nurse and child, and we do not mean exclusively wet-nurses, should preclude the employment of any nurse not absolutely healthy. Cases have been recorded in which previously healthy children, with no hereditary taint of tubercle or scrofula, became tuberculous, as shown by autopsies, from nurses who were also shown to be affected.

THE BRITISH MEDICAL ASSOCIATION.

The 54th Annual Meeting of the British Medical Association was held at Brighton, from Aug. 10th to 13th. President, Dr. Withers Moore. The attendance was large, the British Isles being well represented, while the number of foreigners was greater than usual. Among those who took an active share in the proceedings may be mentioned Prof. Liebrich of Berlin, Charcot of Paris, Drs. Lusk and Emmet of New York, Billings of Washington, and Geikie of Toronto. A feature of special interest was the presence of a delegation from the International Medical Congress to be held in Washington, September 1887, to extend an invitation to the members of the British Medical Association. Dr. N. S. Davis of Detroit seems to have won golden opinions from the members of

the association, by the manner in which he presented the invitation and assured the members of a cordial welcome by their American brethren. The president's address was on the higher education of women, and dealt with the question from the view of its benefit to the race, rather than its benefit to the individual. He thought their higher education "tends to indispose them for matrimony and unfit them for maternity." The address in medicine was given by Dr. John S. Billings, who took the place which was to have been filled by the late Austin Flint. The address on surgery by Mr. F. A. Humphrey, was directed to showing the necessity of a more intimate acquaintance of the medical treatment of surgical cases, by surgeons of the present day. Mr. Humphrey seems inclined to think that while surgeons are achieving brilliant success in the treatment of the internal organs in disease, they are restricting themselves too much to operative measures, to the exclusion of medical methods.

In the surgical section the address on surgery was given by Mr. Erichsen. He says: "That the final limits of surgery have been reached in the direction of all that is manipulative and mechanical there can, I venture to think, be little doubt." He hopes for an advance in the development of methods of scientific research, and believes that it is to biology we must look for an elucidation of surgical problems.

Dr. Taaffe gave an able address on "Various Topics in Public Medicine," Dr. Clouston on "The Relationship of Bodily and Mental Pain."

The meeting as a whole seems to have been a very profitable one. The spirit of brotherly feeling evinced in the speeches of the visitors was very marked, and the home management appointments left nothing to be desired in making the stay of all the members and visitors, as pleasant as it was profitable.

Drs. Hingston of Montreal, and Grant of Ottawa were elected honorary members, while a number of other Canadians were present, among them being Drs. Geikie of Toronto and Stewart, of Montreal.

Urethran in Traumatic Tetanus.—Dr. Jackman reports a cure (*Lancet*) of a severe case of tetanus in a boy of 15, from the use of urethran and chloral combined. Chloral was given in 25 grain doses every three hours. This relieved the paroxysms of pain slightly during the day, but lock-jaw, opisthotonos, etc., remained, and the pains at night were severe and frequent. Under this treatment, fluid nourishment being given, the case went on with no abatement of symptoms for 10 days, when the chloral was left off and 4 grains of urethran were administered every four hours. This, on the first night had acted so well, that it was continued, the patient making continual improvement, till he was entirely well, in about 25 days.

Disinfecting the Hands. — Dr. Kümmell (*Centr. fur. Chir.*) having made numerous experiments, tending to show how long the hands may remain infectious, and how to disinfect them, recommends washing with hot water and potash soap, using a nail brush thoroughly. This is followed by a disinfecting solution of 3 % carbolic acid, 50 % chlorine water or 1 % corros. sub. The arms should receive attention also, and the power of the clothes to carry infection should not be forgotten. The chlorine water mentioned above appears to have been the most efficacious. After a post-mortem examination, etc., a 5 % carbolic acid solution, a strong potash soap and water, as hot as can be borne, should be employed.

Brain Surgery.—A short time ago, Mr. Victor Horsley operated upon a patient at the National Hospital, London. The patient was suffering from epilepsy brought on by an injury to the head, which involved the brain. Mr. Horsley trephined in the neighborhood of the scar, and after removing the diseased bone, removed the scar in the brain. He removed a mass of cicatricial and brain tissue from the upper end of the fissure of Rolando, $1\frac{1}{2}$ inches long, 1 inch deep and $\frac{3}{4}$ inch broad. The man recovered without a bad symptom, all dressings being removed on the tenth day.

American Public Health Association.—We beg to remind our readers of the meeting of the above Association to be held in Toronto on the 5th, 6th, 7th and 8th of the present month. The meeting will open at 10 a.m. on Tuesday, in Shaftesbury Hall, Queen Street West. A number of able papers will be presented on the following and other topics: Disposal of Sewage; Water Supply; Teaching of Hygiene in Schools; Suppression of Epidemic Diseases; Prevention of

Disease in Factories and Workshops; Plans of Houses, etc. The President is Dr. Walcott, of Cambridge, Mass., and the first Vice-President is Dr. C. W. Covernton, chairman of the Ontario Board of Health. A very interesting meeting is anticipated, and it is to be hoped there will be a large attendance of those interested in sanitary matters.

THE NEW YORK POLYCLINIC. — The increase in the size of the classes in attendance at the Polyclinic has necessitated an increase in the number of clinics, so that during the session of 1886-7 no less than 86 clinical demonstrations will be given every week. During the past session there was a total of 240 practitioners in attendance upon the various clinics, making since the opening of the school in 1882, a total of 812 matriculants. The list of Professors is almost identical with that at the organization of the Polyclinic. A department of Otology has been recently added to the course.

NAIL-SWALLOWING.—Dr. J. W. Smith, writing to the *Lancet*, mentions the case of a boy, 4 years old, who swallowed a brass-headed nail 2 inches long. The child was very pale and anxious-looking for four days, and at the end of seven days the nail passed in a mass of hardened fæces. The treatment was intended from the first to keep the bowels confined, viz., a mixture of 2 minims of a solution of morphia and 5 minims of dilute sulphuric acid, every 3 hours.

TEST FOR DRINKING WATER.—It is said that a clear solution of tannin is a capital test for the fitness of water for drinking purposes. Dr. Hager proposed this in 1871. Pour a tablespoonful of the solution into a tumblerful of the suspected water. If no turbidity occur within five hours, the water is good. If turbidity occur during the first hour, the water is unwholesome, and if within the second, it is not to be recommended.

DETECTION OF BLOOD IN THE URINE.—M. A. Luchini proposes the following method for determining the presence of blood in the urine. One drop of acetic acid and forty-five minims of chloroform are added to two and one-half drachms of the suspected urine, The phial is to be well shaken and then set aside to stand for a time. If the urine contain blood the chloroform, which settles to the bottom, will have a reddish tint, the depth of which will vary according to the amount of blood present.

GAMBETTA'S BRAIN.—It is stated that there was a considerably increased growth of the cortical tissue in the neighborhood of Broca's convolution in Gambetta's brain. A writer in the *Brit. Med. Jour.* thinks this confirmatory of the generally accepted idea that this portion of the brain governs articulate language, Gambetta's powers of oratory and of memorizing being very remarkable.

LOOMIS' TONIC.—The following is known as Loomis' tonic:

℞	Quiniæ sulphatis	grs. xv.	
	Tinct. Ferri chlor.	℥ij	
	Spts. chloroform		
	Glycerine	*aa* ℥iij	
	Aquæ	ad ℥ij	—M

Dose: A teaspoonful three times a day.

MIXTURE FOR ASTHMA.—The following prescription is much used by Dr. Fothergill in the treatment of asthmatic patients:

℞	Amm. Iodidi	℥ij	
	Amm. Bromidi	℥iij	
	Syr. Tolu	℥iij	
	Tinc. Lobeliæ	℥v	—M

Dose: a teaspoonful.

COUGH MIXTURE.—Dr. H. C. Wood (*Therap. Gaz.*) recommends the following as an excellent sedative cough mixture:

℞	Pot. citrat.	℥i	
	Succi. Limon.	℥ii	
	Syr. Ipecac.	℥ss	
	Syr. simplicis	ad ℥vi	—M

SIG.—℥ss four to six times a day.

Paregoric may be added when there is much cough or irritability of the bowels.

HYBRIDISM.—At a late meeting of the St. Louis Medical Society, Dr. Funkhouser exhibited an embryo five days old, the offspring of a rooster and a duck. Sixteen eggs had been placed in an incubator but this was the only fertile one. This seems to do away with our ideas about the sterility of different species.

ADDITIONS TO TRINITY MEDICAL SCHOOL.—By the addition of a new wing to this building a new

Pathological Laboratory has been formed, and one of the lecture rooms increased in size. The institution is now second to none in the Dominion in point of accommodation and equipment.

Treatment of Acute Rheumatism.—A writer to the *Russkaya Meditsina* says that of all the remedies whith he has tried during the past twenty years he finds nitrate of potassium the most reliable. He gives two drachms daily in raspberry syrup, a dose being administered every two hours. With this he prescribes an ointment as follows:

Olei. Hyosc.	ʒi.
Ung. Hyd. Cinerei.	ʒii.
Ext. Aconit.	ʒi.

He finds this treatment especially useful in cases where the salicylates fail. He usually cures a case in two or three weeks and when commenced early no other joints are as a rule affected.

Menthol in Urticaria and Pruritus.—It is said *(Am. Jour. Pharmacy)* that menthol is the most rapid and certain remedy we possess, not only to alleviate itching, but to cure the above.. It instantly cures the itching in eczema. The solution should be of the strength of two to ten grains to the ounce of water.

Treatment of Telangiectasis.—This authority *(Borügen)* recommends that the spot and area of skin 2mm beyond it be painted four days in succession with collodium containing four per cent. of corrosive sublimate. The cure is rapid and absolutely painless.

Pills for Metrorrhagia. — Anchord's pill (*Gaz. de Gyn.*) is said to be

℞	Ergotin	gr. xxv.
	Quin. sulph.	gr. xxx.
	Pulv. digital.	
	Ext. hyosc.	*aa* gr. iiiss.

M. et div in pil No. xx.

S.—From five to ten daily.

Bichloride in Diarrhœa in Children.—Wm. M. Millard, M.B., says he obtained good results in that form of diarrhœa prevalent among children between weaning and five years of age, characterized by horribly offensive stools, by disinfecting the bowel by bichloride. He uses liq. hydrarg. perchlor. in 5 to 10 minim doses, every hour or two. He finds it usually effective in 12 hours or less.

Sodium Chloride.—Dr. Branche says *(Bull. Gen. de Thérap.)* strumous and phthisical persons are much benefited by large quantities of salt. He thinks anæmia is also improved, if not cured by its use. Dr. Pidoux also recommends tuberculous persons to partake freely of salt at their meals.

Calcium Sulphide for Boils.—This agent has a great reputation for the treatment of boils, carbuncles, acne, etc. It is given best as a pill made by triturating the agent with sugar of milk, and adding sufficient tragacanth to make a mass. This mass soon undergoes decomposition.

Bequest to Science.—Herr Von Ritter has left £15,000 to the University of Jena, the interest of which is to go to the teaching of the doctrines of Darwin. Prof. Häckel proposes to establish, with part of this sum, a professorship of zoology, to be called the Paul Ritter professorship.

A simple and easily applied test of actual death was mentioned at a recent meeting of the Amiens Medical Society, by Dr. Lessenne. It consists in pricking the skin with a needle. On the living body such a pin prick leaves no trace. On the corpse the puncture remains open.

Solutions that last.—Dr. Abbott recommends (*Med. Rec.*) that solutions of atropine, morphine, cocaine and other alkaloids be prepared with camphor water, 1 grain to the ounce. He has by this means kept solutions for a year without having seen any fungi develop.

Precaution.—Dr. Crevenger (*Weekly Med. Rev.*) recommends that the hands be held over strong liquid ammonia before commencing a post-mortem examination, when the smarting will reveal all sensitive or abraded places, which can then be touched with caustic.

Amenorrhœa.—Dr. Goodell says that amenorrhœa in anæmic subjects is best treated with vigorous tonics of iron and strychnia; but that when there is a condition of plethora he finds pot. iod. the most effective remedy.

Orchitis and Epididymitis.—Mr. Loudes says

(*Lancet*) that painting the affected part with nitrate of silver ℥ii to ℥i, with rest in bed and support to the organ, is a very successful method of treatment in the above.

Linseed Oil in Pruritus Ani.—A writer to the *Boston Med. & Surg. Jour.* says, that linseed oil freely used externally, promptly cured two cases of this troublesome malady, when all the classical remedies had failed.

The Incubation Period of Diphtheria.—Mr. Percy G. Lewis gives two cases (*Lancet*) in which, from accurate observation, it appears that the incubation period of diphtheria is about 48 hours.

Cheap Quinine.—It is stated (*Lancet*) that Mr. Cresswell Hewett has succeeded in the manufacture of quinine by synthesis, and that its cost will be about 5 cents an ounce.

For Myalgia.—Prof. Bartholow (*Coll. & Clin. Rec.*) recommends the following liniment for myalgia:

R—Chlor. Hyd., ... ℥j.
Lin. Sapon., ... ℥ij.—M.

Tenesmus of Diarrhœa.—It is said that the tenesmus of diarrhœa or dysentery may be relieved by raising the buttocks higher than the rest of the body by a pillow placed under them.

Kolu Nut.—Chewing kolu is said to lessen the effects of alcoholic stimulants, as also to lessen the desire for stimulants after a debauch.

Personal.—Dr. Wm. T. Harris, of Brantford, Ont., is attending a course of lectures at the Post Graduate Medical School New York.

We regret to notice the death of Dr. James G. Waklay, Editor of the London *Lancet*, in the 61st year of his age. The cause of death was cancer of the tongue. He held the position of editor-in-chief of this well-known journal for upwards of a quarter of a century.

A writer to the *Brit. Med. Jour.* concludes that the eyes of children of blind parents are not less strong than those of other children, but that such marriages are less fruitful than those of sighted persons.

"Who is Your Doctor?"—"Doctor! I don't want any doctor. My neighbor has one, and when he comes I listen at the door and get the prescription free. No doctor for me."—*Fliegende Blatter.*

Mr. Scudamore, Rugby, believes hernia is hereditary to a much greater extent than is generally supposed.

The Medico-Chirurgical Society of Pavia have come to the conclusion that bacteriotherapy is neither a rational or practical remedy for tuberculosis.

Books and Pamphlets.

Practical Clinical Lessons on Syphilis and the Genito-Urinary Diseases, by Fessenden N. Otis, M.D., Clinical Professor of Genito-Urinary Diseases, College of Physicians, New York. Surgeon to Charity Hospital, etc., etc. Pp. 577. New York: Putnam's Sons. Toronto: Williamson & Co., 1886.

This is a Student's edition, to be followed shortly by another, containing additions on Hereditary and Infantile Syphilis, and on Genito-Urinary Reflex Irritations, with some chapters on Diseases of the Prostate and Stone in the Bladder. Dr. Otis is so well known as a Syphilographer, that comment as to his views is unnecessary. The work is clinical, such cases being presented as are typical and practical, with such additions as have been suggested by the author's large experience. The Lessons being really lectures, the book presents the advantages and disadvantages of this style of writing. The views of the author are set forth in a remarkably lucid manner, and a thorough perusal of the book must give an intelligent idea of the subjects under consideration. The price is just sufficient to cover cost of publication; the author being sufficiently compensated in the thought, that his disciples are able to make themselves more familiar with his principles than they would have been had the present edition not been issued.

Handbook of Practical Medicine, by Hermann Eichhorst. Volume I. New York: Wm. Wood & Co., 1886.

This volume treats of the diseases of the circulatory and respiratory systems. It is illustrated by one hundred and three wood-cuts, which, while

they are by no means artistic, are fairly plain. The author is professor of pathology and therapeutics and director of the medical clinic at Zurich, which will account for the careful treatment of the pathology of the diseases under consideration, and at the same time for the practical nature of the work in its therapeutic and clinical aspect. There is no padding. The sentences are short and to the point, and we think the work is a valuable addition to Wood's Library for the year.

Insanity and its Treaement. Lectures on the Treatment, Medical and Legal, of Insane Patients. By G. Fielding Blandford, M.D., Oxon. Third Edition. New York: Wm. Wood & Co., 1886. Pp. 379, Cloth.

The author delivered this series of lectures several years ago, since which time they have been twice revised. While the advances and discoveries in the physiology and therapeutics of insanity have not of late years been of much importance, yet as the author says, "time and experience enable us to estimate the value of the knowledge we possess to test our remedies, and modify our treatment." Being in the conversational style of lectures, the matter forms pleasant reading and is easy of assimilation. To the original twenty lectures the publishers have added a monograph on "Types of Insanity," by Dr. Allan McLane Hamilton, illustrated by plates and fac similes of patients' handwriting, etc. We recommend the work to the general practitioner, requiring aid in this difficult subject.

Bright's Disease and Allied Affections of the Kidneys. By Charles W. Purdy, M.D., Queen's University, Professor of Genito-Urinary and Renal Diseases in the Chicago Polyclinic, etc. 8vo., 288 pages, with 18 illustrations. Cloth, $2. Philadelphia, Lea Brothers & Co., 1876.

Diseases of the Kidney are confessedly very important, and under the nomenclature which has been in use, very difficult of clear comprehension. Dr. Purdy has discarded the anatomical divisions of nephritis heretofore in use, as misleading, a matter upon which we think the reader may congratulate himself. The author deals fully with scarlatinal and puerperal nephritis, and has rendered the dark ways plain; a matter of great importance from a practical standpoint. The author prepared himself for such a work by a course of special pathological investigation i Aberdeen University, being aided therein by Pro D. J. Hamilton. The book is excellently printe and the plates well executed; all except one a original.

Young Wife—"There's a gentleman in th parlor, dear, who wishes to see you."

He—"Do you know who it is?"

Young Wife—"You must forgive me, my dea but that cough of yours has worried me of lat and you take such poor care of your health, and— and O, if I were to lose you, my darling! (Bursts into tears.)

He—"There, there, dear. Your fondness fo me has inspired foolish and unnecessary fear I'm all right; you musn't be alarmed. But I' see the physician, of course, just to satisfy yo Is it Dr. Pellett?"

Young Wife—"N-no, it is not a doctor; it's —a—life insurance agent."—*Reconstructives.*

Births, Marriages and Deaths.

On the 2nd ult., Dr. W. H. Blackstock to Annie youngest daughter of John Keefer, Esq., of Thor old, Ont.

On the 15th ult., H. C. Wilson, M.D., M.P.P Edmonton, to Emily, eldest daughter of Mr. A B. Lee, of Toronto.

On the 16th ult., Alexander Davidson, M.D. C.M., M.R.C.S., Eng., of Toronto, to Frances M. second daughter of W. Thorold, St. Williams.

On the 18th ult., J. D. Courtenay, M.B., t Minnie J., eldest daughter of R. B. Morrison, o Morriston, Ont.

On the 20th ult, T. H. Stark, M.D., of Toronto to Jennie A., eldest daughter of the late G. W Smith, Ottawa.

On the 17th of August, Dr. C. G. Moore, o London, Ont., aged 70 years.

On the 21st of August, Dr. G. B. Oakes o Digby, N.S., aged 47 years.

On the 17th inst., Dr. George L. Beard, o Woodstock.

*** *The charge for Notices of Births, Deaths and Mar riages is Fifty Cents, which should be forwarded in postag stamps with the communication.*

THE CANADA LANCET.

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Original Communications.

CASE OF VESICAL CALCULUS*

BY W. G. ANGLIN, M.D., M.R.C.S., ENG., KINGSTON, ONT.

In August last it was my privilege to assist Dr. J. Rutherford Morison, F.R.C.S, Edin., of Hartlepool, Eng., while he operated for stone. The result was the extraction of a uric acid calculus of extraordinary size—the largest of pure uric acid on record, and as I have with me a plaster cast of the calculus, and some notes supplied to me by Dr. Morison, I have pleasure in bringing the case under the notice of this Association, especially as I am not aware that the notes have been published in any of the medical journals.

J. T., æt. 52, married, a seafaring man, residing at West Hartlepool, complains of pain and difficulty with his water. His general health has been good with the exception of the trouble complained of. He has been somewhat addicted to alcoholic excess. He looks a strong man, but much worn by pain and loss of rest.

History: For the last 30 years he has had attacks of pain and difficulty in micturition. He thinks that an accident, a fall on the perineum over a railing, which he met with when a boy may have been the cause. During the attacks he has had a frequent desire to micturate accompanied by straining pains in the perineum and rectum, and a shooting into the end of the penis. These attacks lasted a variable time, occasionally passing off in a few days, at other times remaining for months. He says they had to reach a height, after which followed a gradual return to health, and for a time he remained perfectly well. Several years ago, during one of the attacks, he passed blood with the urine. At different times he has consulted physicians and surgeons, but nothing did him any good except morphia which relieved his pain. He has been frequently sounded for stone but without result. His *present attack* began four months ago in the usual way, with painful and frequent micturition, for which, up to the time of my seeing him, he has been under medical care and steadily getting worse. At the time of my first seeing him, I was going away for three weeks, so, on examining his urine, and finding it to contain one-third albumen, some pus, and to be of low sp. gr. (1008), I ordered him to live on milk and take 15 ms. of tr. ferri. perchlor. three times a day, postponing any instrumental interference till my return. On August 14th, three weeks having expired, I again visited him. So far as can be ascertained all his organs are sound with the exception of his genito-urinary system. He is wearing a urinal, as his urine is constantly dribbling away. As a consequence his thighs are excoriated, and he has a strong urinous odor. On palpation a rounded swelling can be felt in his lower abdomen reaching midway between the umbilicus and pubis, which is dull on percussion, and pressure on which causes a desire to micturate, and the escape of some urine by the natural channel. Pressure over both kidneys posteriorly causes pain. Per rectum, a round, hard, tender swelling is easily felt projecting into the lower part. A soft rubber catheter enters as far, apparently, as the prostatic urethra, but here it hitches causing great pain, and about a teaspoonful of urine escapes in little gushes. The catheter will not enter the bladder. I arranged to give him chloroform the following day and make a thorough exploration.

August 15th. On giving chloroform the distended bladder could be distinctly felt as a rounded swelling in the lower abdomen. A soft coudeé instrument stuck at the same spot as the one introduced yesterday, and no more water could be obtained through it. A silver catheter now tried, struck a stone at the point of the obstruction lying in the urethra and could not be passed beyond it. I arranged to make an incision and by that means empty his bladder next day.

August 16th. The staff when introduced hitched on the urethral calculus, but passed on into the bladder where it struck another

*Read before the Ontario Medical Association, June, 1886.

calculus. The ordinary (as for lateral lithotomy) incision was now made, and bled profusely from the whole surface. The transverse perineal artery was so active as to be formidable, and Pean's forceps were fixed on each end of the divided vessel. When the urethra had been excised a small, flat stone escaped into the wound, and was extracted by the finger, which was then passed into the bladder on the stone there, and the staff was removed. The stone was of such large size that I enlarged the wound in the bladder with a probe-pointed bistory before introducing the largest size of lithotomy forceps. Expanding the forceps widely I grasped the stone, which was so large and of such a shape that they slipped off. After repeating the process in a variety of directions, it was plain that the stone could not be removed through this incision, and that if the stone was to be had it must be by the supra-pubic operation. The wound had all along bled profusely from its whole surface, and by this time the patient had lost at least a pint of blood. A sponge was packed into the perineal wound, the supra-pubic incision made, and the bladder opened above the pubis on the stone, a matter of little difficulty, as the stone was pushing forwards the anterior bladder wall. The incision in the skin extended upwards for about four inches from the pubic bone, the bladder wall being opened for about 2 inches up to the reflection of the peritoneum. The lithotomy forceps were again introduced, but had no power and slipped. There was the same difficulty as before. The midwifery forceps of a neighboring practitioner were now sent for and on their arrival one blade was introduced at a time, as in an ordinary instrumental delivery. The entrance of the first blade was followed by a gush of putrid urine which escaped over the abdominal wound, and must inevitably have run into the peritoneal cavity if it had been opened. This urine—about 2 oz.—was lying in the base of the bladder, under the stone, and at a lower level than the urethral opening. The forceps being locked, the stone was easily removed by slow and gentle traction, the wound in the bladder expanding without laceration, and no further obstruction being encountered because of the long incision through the superficial soft parts.

The bladder wall was very much thickened, and the lining membrane so vascular that it bled freely. Lying at the lowest part of the bladder was another small flat stone which was now removed. The operation was completed by the introduction of two deep and three superficial sutures of catgut into the abdominal wound, leaving only the lower half open; by stitching a full-sized drainage tube, reaching the bladder, into the perineal wound; by flushing out the bladder and wounds with boracic lotion, and finally by the introduction of a large sponge with Pean's forceps attached, into the bladder to stop the oozing from its interior still going on. The operation occupied three-fourths of an hour, including the delay occasioned by having to send for forceps. An hour afterwards the bladder sponge was removed, and all bleeding had ceased. The patient had a fair pulse, but had not yet rallied from the cold, chloroform and shock.

AFTER PROGRESS.

August 16th, evening. Fair pulse 110; temp. 97° F. Has not yet recovered from shock, and is inclined to be cold. Hypodermic injection of $\frac{1}{6}$th gr. morphia, and some hot milk and water.

August 17th. Morning, temp. 97°; hands still cool but body warm and perspiring. Has had a good night; slept 3 or 4 hours, and taken freely of milk without sickness. 1 p.m.—Temp. 97.6°; pulse 112. 3.40 p.m.—T. 99°; p. 120. 10 p.m. —T. 102.6°; p. 160; ordered 10 grs. quinine, 10 grs. pulv. ipecac co.

August 18th. 1 a.m.—T. 100.2°; p. 140. 8.20 a.m.—T. 97.4°. 3.20 p.m.—T. 98.8°. 8 p.m.—T. 99°; p. 117. After this the temperature only once reached 100°. For several nights he required morphia to make him sleep, not because of pain, but restlessness.

August 19th. Most of the urine escapes by the abdominal incision in spite of the fact that perineal tube is large and patent. The tube removed in consequence. Secretion of urine very free, and has been ever since operation. To-day he took a quantity of egg-flip, looks much better, but his tongue is dry and he is disposed to hiccough. Ordered calomel gr. j. every four hours.

August. 21st. His pulse occasionally intermits and has kept up to about 120 since operation. Ordered tr. digitalis M. 10 every 4 hours. Tongue much cleaner. Asked for and relished some tea and toast.

August 22nd. Most of the urine escaped through the abdominal wound, and a tendency,

apparently, for it to find its way into the urethra has caused some pain. I passed a full-sized drainage tube through from perineal to abdominal opening, and ordered bladder and tube to be syringed out from above every 4 hours with boracic lotion. Patient seems very well and strong. Pulse 100, temp. normal, but cannot sleep well at nights. Urinary secretions very free.

August 27th. Is very well and strong. Upper part of abdominal wound healed, lower part granulating, and both it and perineal wound have closed in so as to embrace the drainage tube. His diet has been gradually improved, and to-day he was allowed to have for dinner, chicken with vegetables, pudding and a glass of beer. After dinner he enjoyed a smoke, and was anxious to know if he could soon get up a little. Was in excellent spirits.

August 28th, morning. Looks rather depressed, and says he does not feel in such good spirits. Has had occasional hiccough, but as his pulse is good, temp. normal, wounds look well, and secretion of urine free, no importance was attached to it; as even when fairly well for some months he has had it occasionally. Evening.—Hiccough much worse, never lets him rest. Tongue dry; pulse 120: temp. 98.4°; very thirsty: drowsy looking and low spirited. Says he is going to die. Hypodermic of morphia and a variety of other things tried.

August 29th. Hiccough never ceases. Has been delirious all night, wanting to get out of bed, etc. Died early in the morning. No *post mortem* can be obtained.

CASE OF PUERPERAL PULMONARY VENOUS THROMBOSIS.

BY AMELIA LE SUEUR YEOMANS, M.D., WINNIPEG, MAN.

On July 14th, 1885, I was summoned to attend Mrs. G. M. in confinement. I found the patient in a very small, ill-ventilated room, around which clothing was hanging in profusion. Her youngest child, a baby of thirteen months, had been weaned only two months previously, and the eldest was now barely two years old. No nurse was present, the patient's husband being the only person available as assistant. Complaints about this state of matters were met by the reply that they were "too poor" to do any better, and as labor was progressing, little improvement could be effected beyond airing the stuffy room as well as possible and removing all superfluous clothing. The patient was not yet 20, a very restless, nervous and insubordinate woman. Her labor was easy, rapid and normal in all respects; child healthy. An hour after all was well over, I left, promising to call next morning. 15th. Found patient sitting up in bed sewing a gown for her infant; compelled her to lie down and informed her husband that unless my orders were obeyed I would have nothing further to do with the case. Inquiry elicited the fact that she had also that morning, while her husband was absent, left her bed and carried into her room from the next one, a crying child. Called in the afternoon and found patient with flushed face, pulse rapid and weak, temperature 102°. From that time her condition grew worse. Septicæmia of a violent character developed itself, with all attendant characteristic symptoms, wild dreams, with some delirium. Her temperature ranged from 102° to 106°. It is worthy of remark, that throughout this illness the patient's pulse was not rapid in proportion to her temperature, and on this fact hopes of her restoration were based, which were realized.

She recovered after most assiduous and careful treatment. Warburg's tincture was found the most valuable of the medicines employed, and intra-uterine antiseptic injections were freely used, always by myself. Convalescence being fairly established, this patient and her husband were earnestly warned of the danger that would ensue should she again become pregnant before a proper length of time had elapsed for the thorough re-establishment of her health; nevertheless, three months had not passed before she came to me with a request to induce a miscarriage in her case. This was promptly refused, and she was also told that I would not be willing to attend her again. June 21st, 1886, I was again summoned to the same patient. The messenger described her as having an earnest wish to speak with me on an important matter. As she lived only a few doors from my office I went at once, and found my former patient convinced that her fourth labor had commenced and most anxious for my services. I yielded the point, and she informed me that the "waters" had already "broken," but that she had

as yet felt no pain. On vaginal examination, I found sufficient dilatation of the os for admission of the tip of my forefinger. Assuring her that all promised favorably, I inquired as to her general health, and was told that her appetite was poor and that she had been troubled with a frequent tendency to faint, also that she had been working very hard for some time past. I ordered a nutritious diet and rest in the horizontal position at the least approach of faintness, ascertained that the bladder and bowels had been satisfactorily emptied, and left, promising to return by 10 p.m. At that hour I saw my patient again. The uterus seemed to have settled a good deal lower in the pelvis, but there was little or no increase of dilatation of the os, no pain of any consequence, water dribbling away slowly, temperature normal, pulse 102.

On the morning of the 22nd patient complained of a slight headache and feeling of giddiness. There were no labor pains and less water (she thought) was escaping. Her spirits seemed good, pulse was a little slower than the previous evening, temperature normal. I told her that I would not come again until she sent for me, which she was to do as soon as she began to have consecutive pains, as I judged that when the uterus began to act, delivery would follow very rapidly.

At 11.40 on the night of the 22nd her husband came for me. I was with the patient almost immediately. She said she had had but one pain before sending for me. Uterine contractions continued strong and very effective, and the child (a fair-sized boy) was born at 1.15, June 23rd. Fl. ext. of ergot, ʒj., was given directly after the expulsion of the head. The uterus now contracted firmly, the placenta was expressed from its cavity by Credé's method. Patient said she felt well, but was enjoined not to stir. Rather a free gush of blood followed the escape of the placenta, and it was noticeable that it was instantly clotted in the bed. Grasping the uterus firmly, I secured its satisfactory contraction, which continued up to the time of the patient's death. There was no further undue escape of blood. I sat watching the uterus and noting patient's general condition for almost an hour and a half. Her pulse varied from 78 to 87 during that time and was rather irregular, but she said she felt well. In spite of earnest injunctions to the contrary, she talked a good deal. At 3.30 a.m., there being absolutely no one else to do it, I left her for the purpose of washing and dressing the baby. Her husband was directed to sit by her and see that she did not stir. I could hear him through the open door enjoining quietude upon her, and judged that in spite of him she made some impulsive movements. It must have been about fifteen minutes after I left her that she called me, saying that she could not describe the terrible character of her sensations. I found her pulseless at the wrist, gasping for air, perfectly conscious, her face expressive of intense anxiety. Uterus firmly contracted; there had been no flooding.

Stimulants were at once exhibited freely and their administration continued throughout. Dr. L. B. Yeomans was sent for, and with her assistance internal stimulation and external applications of heat and friction were constantly kept up. The window-sashes were entirely removed, that air might have free admittance. Twice our exertions were rewarded by the re-appearance of the wrist-pulse, once it could be counted—126. Had it been possible to keep the patient perfectly still, the fatal issue might have been delayed, or perhaps averted; but her agony was such, that with any means at our command it was impossible, entirely, to control her. A stethoscope was not at hand, but no basic cardiac murmur was discovered on direct auscultation, which was made several times over the heart. Nevertheless, the symptoms were so marked, that we could not fail to class the case as one of Pulmonary Venous Thrombosis. A third physician was sent for, but unfortunately did not arrive until after the patient's death, which took place at 6.45 a.m., five and a-half hours after the termination of her labor.

It is much to be regretted that an autopsy on this case could not be obtained, and the exact location of the obstructing clot ascertained. Patient complained more of the character of her sensations than of sharp pain. She would press her hand on her heart and say, "Why have I such a terrible feeling (sometimes she spoke of it as a pain) here?" She mentioned also numbness of her lower extremities, and a sense of suffocation. That the clot formation was to some extent gradual, seems evident from the fact, that twice early in the attack the heart contracted powerfully enough for the pulse to be perceptible at the wrist. This

patient's blood was probably markedly hyperinotic, as a consequence of her four pregnancies following so closely one upon the other; she was anæmic from very poor living and constant overwork during the past winter. It seems possible, also, that her fourth pregnancy commenced before she had fully recovered from the septicæmic attack which I have already mentioned as following her third delivery.

That the case was not one of embolism, seems evident from the early invasion of the fatal attack; there was no time for the degenerative changes necessary to detachment of a thrombus in the uterine sinuses, its migration to the heart and growth there by accretion. This seems to have been a case of spontaneous formation of a venous blood-clot in the right ventricle of the heart or pulmonary artery proper, or perhaps more probably at its point of bifurcation.

In reviewing the case, two points seem worthy of attention: first, as a warning symptom, the tendency to faint complained of by the patient when first I saw her, a feeling which she said she had experienced more or less during the whole period of pregnancy. In all my previous attendance upon her, she had not described this feeling. A judicious tonic course of treatment, persisted in throughout her pregnancy, might have greatly lessened the final risk, in spite of her former criminally careless conduct. The second point is not of practical importance, but a thought naturally arising from the circumstances of the case. If the fatal issue was caused by a peculiar blood state, a condition that would be aggravated by each successive month of pregnancy, it is quite possible that—had the uterus been emptied early—the mother instead of the child might now be alive; but there was no indication for any such treatment when the patient applied to me, nor can I conceive of a possible diagnosis of impending thrombosis so certain as to render the production of an abortion justifiable.

HYDROCELE MULIEBRIS.

BY R. A D. KING, M.D., COMPTON, QUE.

On 20th September, Mrs. R., from a neighboring town, consulted me concerning what she designated as "a peculiar swelling in a peculiar place." I requested her to describe it; what symptoms she experienced, and where it was situated. She did so, and upon examination I discovered a hydrocele of the left side—hydrocele inguinalis interna. I did not arrive at this diagnosis at once or off-hand, as it was the first case I had seen during a practice of 18 years, and I do not remember ever having read anything, in what gynæcological literature I possess, concerning this rare affection, rare at least to me, and I thought it quite a unique case. At first I thought it was a hernia, and its rapid accession rather warranted this supposition.

Mrs. R. is 38 years of age; has had five children. I attended her at her last accouchement, six years ago. Her husband died a year afterwards. About a year ago her menses ceased after a period of irregularity, and she thought she had reached the menopause. Eighteen months since she walked a good deal while visiting Montreal, climbing the mountain and otherwise taking unusual exercise, and once she fell quite heavily on her right side, but does not remember ever receiving any blow or injury to the parts affected, and soon recovered from the immediate effects of the fall. About a month ago she discovered a small enlargement just below Poupart's ligament, which became sore and painful. This gradually becoming larger, she consulted a physician of her town, who recommended poulticing, and she kept on the flaxseed poultices up to the above date. The tension increased, but the soreness diminished somewhat. She was told by her attendant that it would break; that it was an abscess. I found the tumor very tense upon her standing up, but becoming softer when she was in the recumbent position. I could not employ the light test owing to her being in street costume, but felt quite sure that it was not an abscess from its appearance and history. Neither did I think it to be an ordinary hernia, or an epiplocele, and decided to test the matter with a hypodermic needle. This I did, and drew off four ounces of hydrocele fluid. There was evidently more than one cyst, as I had to partially withdraw the needle and re-insert it before getting all the fluid. The neck of the sac could be traced upwards with the finger, and while standing the bag was broadest at the most dependent part.

The fluid drawn off was of a straw color, the last ounce being thicker, much the same in appearance as that taken from the pleura at a second

aspiration — sticky and albuminous — the final drachm being bloody, probably from a prick of the needle's point.

After satisfying myself that all the contents were withdrawn, I applied camphor and chloral solution to allay the aching, dragging pain experienced. She expressed herself much relieved after the removal of the fluid, and I instructed her to come again if it re-appeared, and in the meanwhile to wear a compress—just as soon as the soreness subsides.

In looking up the literature upon hydrocele in woman, I find that Hennig, of Leipsic, read a paper on the subject before the Gynæcological Society of Germany, and he says he can only find 39 cases and that he had only seen two.

Correspondence.

MALICIOUS PROSECUTIONS FOR MALPRACTICE.

To the Editor of THE CANADA LANCET.

SIR,—A law suit, interesting to the profession has just closed in which a patient sued a Dr. for malpractice. The jury contrary to the opinion of medical gentlemen who were acquainted with the facts of the case, returned a verdict in favor of the plaintiff.) The Dr. carried it to the higher courts and asked to have the verdict of the jury quashed or be given a new trial. The judges quashed the verdict, not even giving the plaintiff the benefit of a new trial. This case illustrates the unfair treatment our profession receives at the hands of a jury, and the annoyance and very heavy pecuniary loss we may be subjected to at the hands of our patients. Had this Dr. not been financially "solid," he would have been forced to accept the verdict of that jury and been at the expense of $2,000 because some malicious or ignorant persons saw fit to prosecute him. I believe it is to the interest of the profession to make common cause against all law-suits for malpractice. I am informed that a juryman once said, "He is a Doctor; they put it to us, we have him now let us put it to him." And every case of success against a Doctor for malpractice encourages other patients to sue their Doctor. Only the other week I was consulted by one who was going to sue his physician for damages; I advised him against it, when he argued in reply: "So and so got damages against Dr.——, and so and so against Dr. ——, why shouldn't I succeed also."

If the Editors of the LANCET and *Practitioner* would act as a committee who would receive subscriptions from every member of the profession whenever a trial for malpractice came up, and apply it as a common fund for the defence of such trials, we would then be able to get justice, and the success of malicious prosecutions would not then be heard of. This is a suggestion on my part, but I trust the profession will take some definite steps to establish a common defence fund for mutual protection.

Yours, etc.,

EDWIN G. KNILL.

Reports of Societies.

HAMILTON MEDICAL AND SURGICAL SOCIETY.

The regular meeting was held Oct. 5th, Dr. Stark, President, in the chair.

Dr. McCargow exhibited a specimen of an enlarged heart The heart and pericardium weighed 30 ozs. There had been from 5 to 6 ozs. of fluid in the pericardium. There was a large deposit of lymph and fibrin, and the surface of the pericardium was much roughened.

Dr. Malloch brought before the Society a patient aged 21 years, whose right knee he had excised on the 1st of May of this year, the man walked in without crutch or stick, having a thick-soled boot on the affected side. Dr. Malloch read the following notes of the case. The operation performed under strict anticepticism, was that of Dr. Fenwick of Montreal. Watson's splint was used with paraffine bandages. The knee was dressed only four times between the day of operation and the 10th of June, when the original splint was changed as the paraffine had become soft from the heat. Plaster bandages were then used, the soft parts were firmly healed, though of course union had not fully taken place. The patient was then allowed up on crutches and subsequently to put his weight on it. The pieces of bone removed showed unmistakably that there had been ulceration of the cartilages. The patient has never suffered in the least from the knee since the operation.

Selected Articles.

THE PLAINT OF AN AGGRIEVED UTERUS.*

In presuming to ask your attention to a communication from one not of your number, I feel that a few words of introduction would be proper. I am, or at least I think I am, a much wronged Uterus. For a long time I have felt that the medical profession was not acting with fairness toward me;—that, on the contrary, I am made the object of unjust suspicion and annoying espionage. I am the victim of constant fault-finding and accusation. Contrary to all rules of law and justice, I am continually called on to prove my innocence—am never allowed the benefit of a plea of "not guilty." Certain members of your profession have gained the ear of my hostess, and have inculcated a bitter prejudice in her mind against me, so that I am looked on by her, on all occasions and under all circumstances, as the one peccant organ concerning which nothing good could be credited, nothing evil disbelieved.

My innate modesty and shrinking timidity have thus far prevented me from giving voice to my complaints, and I was not without hope that meekness and patience would one day bring their promised reward. But events of late seem to shape themselves more and more adversely. Any anticipation that time would bring relief seems about extinguished, and I am almost ready to prolapse under my accumulated troubles. Oppressed by gloomy forebodings, I yet felt that existence was worth at least a little more of struggle and effort, and, while revolving in my mind what I should do, the idea suddenly occurred to me to lay my grievances before you, in the hope that I might gain a hold on your sympathies, and possibly secure a champion who would enlist his efforts in my cause.

To specify, then, more particularly the matters I complain of, shall be my first business. You are all acquainted with my hostess. You know she is rather thin in flesh, not very well nourished, with feeble and easily disordered digestion, nervous, whimsical; her social and domestic relations not always pleasant, with a good deal of unoccupied time on her hands (she doesn't keep house), a couple of children (who are taken care of by their grandmother), and much afflicted with headaches. You know, also, that she very rarely acknowledges that she feels well.

To give you an idea of how we have been getting along together, it will be necessary to go back a few years. For a considerable period after I began to perform my physiological duties, we got along well enough. But by and by, late hours and undue indulgence in sweetmeats began to tell on my lady's digestion, and, as a consequence, the supply of the particular material necessary to the proper performance of my duties becoming deficient, both in quantity and quality, I could not perform them well, and we had a little trouble. The old family doctor, who was consulted about it, told her mother, among other things, that late hours and excitement, and dissipation were bad for her, but things went on in the same way, nevertheless; I, meanwhile, doing the best I could. One day, however, my hostess heard of some great man, who had been away off somewhere, and who could effect almost anything in the line of relieving afflicted females short of a miracle; so she began to complain more and more in the hope that she might induce her parents to send her to him. And an unlucky day it was for me when she succeeded, as she did. So away we went—the Great Man was seen—and with a wise shake of the head, he said: "Miss, it's your womb." Well, I was astonished—I wondered what I had done—I couldn't think what he meant. I wasn't very long in finding out what he proposed to do in the matter though. A short time afterward I felt something cold, and then I saw a great round opening to the light, and immediately the Great Man's eye came into view. I was so startled and confused, I didn't observe much that he did, but before he quit he had pushed a hard, smooth stem up into my cervix, and I had to wear it there ever so long.

I believe after awhile that my hostess began to think she was better. She went back home at any rate, and began the same routine of life she had followed before. My work was often interfered with by imprudences on her part similar to those which had caused our first trouble, and we didn't get on at all as we should have done. So after awhile away we went to see the Great Man again. This time he introduced me to a crooked, twisted sort of a thing. I heard him say it was a pessary, and he made me ride on that to correct my malposition as he called it. I didn't like this treatment a bit, and soon let them know it, so they very soon took the thing away, and my hostess went home again rather hastily. I wondered why she didn't stay longer, as she did the other time—and that was soon explained, too—there was to be a wedding. Well, that came off in course of time, and as I never gossip about family affairs, even if I am ill-treated, our narrative will be interrupted for a time.

Not so *very* long after this—just as I had expected too—I found I had another duty to perform. I was glad of it, too, for I hoped by doing my best (as indeed I had always done), I might regain my hostess' regard. How well I did, you can see for yourselves any fine day, if you will only peep over into his grandmother's yard—as fine a boy as any-

* Recently read before the Medical Society of the State of West Virginia, by L. D. Wilson, M.D., of Wheeling, West Va.

body's boy. But I wasn't altogether fortunate in my endeavor, for I had the misfortune at one period of my efforts to lacerate my os a little. This I looked on as a trifling occurrence at the time, as it soon healed up again and seemed all right, but eventually I found out my mistake.

My hostess, through nursing and some domestic disappointments, did not seem to get along very well, and after some months we went to see the Great Man again. And would you believe it? "Madame, it's your womb," again. And then he began talking about some other great man. I think he called him Emmet, but I was so set back at the idea of being accused of causing all the trouble my hostess was having, that I didn't attend to much that was said. The result of this conference was that I was vigorously attacked with a lot of sharp tools, scissors, needles, knives and the like. My os was cut where it had been torn, it was stitched up again, and my hostess spent a month in bed. I never could understand what the man did this for, but it all healed up very much as it had done before; and the rest in bed did madame much good. But I had it all to undergo again after the little girl was born. That time my os was again torn, and it hadn't healed up very well, though I believe, if they had only kept madame at rest and given us a little more time, it would have been all right.

Since then we have been getting along very much as before. Sometimes pretty well—sometimes not. We've been to see the Great Man a time or two since, but he doesn't seem to know what else to do. I've been torn open and I've been sewed up, and that seems to have taken him about to the end of his string; so matters are about as I described in the beginning. The old doctor drops in now and then to see the children, but he doesn't seem to concern himself much about madame. He tells her mother she will come around all right some of these days. I occasionally hear him tell about the doings of some of the great men of your profession, gynæcologists he called them. The Great Man we went to was one of them. I heard him once tell about how one of these, I think he called him Sims, used to slit open our cervices to cure all our hostess' complaints, and then, right after him came the other man I mentioned, Emmet, who cured these same complaints over again by sewing up those slits. . . . . Being a simply constructed organ, then, and having such a limited field of usefulness, it cannot be otherwise than that I am subject to very simple derangements; and that the effects of these should not differ in any material respect from similar derangements in similar structures anywhere else. An abrasion or laceration in the mucous membrane of my hostess' mouth ought to produce pretty much the same effects as when they are located in my os, and they ought to be amenable to pretty much the same treatment.

In my search for knowledge about myself, I accidently glanced one day into an instrument-maker's catalogue. Here was a find. It made me dizzy to look through it. Such a lot of queer, crooked, ugly and savage-looking things, no uterus ever imagined. I thought I would look over the list of such instruments as are used in the treatment of the less serious disorders attributed to my kind, and this is the result: There were 62 speculums (one of these is what the Great Man looked at me through), 31 dilators, 7 uterotomes, 8 scarifiers (scare-ifiers I first read it), 113 pessaries, and sounds, and depressors, and elevators, and replacers, and uterine forceps, and curettes, and applicators, and syringes, and retractors, and oh, I couldn't name them all in an hour. I counted 273 of them, and then quit. I was impressed with one thought, and that was, that these gynæcologists must be a wonderfully industrious set of men. Remember, too, that I only counted those instruments which are used in minor uterine surgery, as it is called; I got tired before I came to those used in removal of tumors, vesico-vaginal fistula and the like; there must be one or two hundred more of these.

I started to find out if I could what gynæcology was founded upon, and I found that if I were left out, there would not be much of the specialty left. It was about what I had expected, and yet it made me uneasy. I wish I didn't occupy such a prominent situation. The gynæcologist, you know, looks at the world through a speculum, and, as I am always at the other end of it, he has some excuse, I suppose, for considering me to be the foundation on which the structure of his fortune and fame rest. But this thing of having a lot of busy, inventive, ambitious men continually at work contriving new reasons for doing new things to me, and devising new instruments to do them with, opens up a prospect which is far from reassuring. What I most dread is the legitimate and inevitable result of this state of things. Under the stimulation of emulation, honorable and otherwise, every square inch of my os, cervix and mucous lining is continually interrogated, and its various states of anæmia or hyperæmia, congestion, active or passive, redness or paleness, minutely dwelt upon, the tilt of my body wisely scrutinized, the depth of my fundus carefully probed, every segment of my muscular wall solemnly investigated, mucous folicles inspected, epithelial lining examined, secretions analyzed and differentiated, every constituent part of myself worked over and compared with some ideal standard, which each individual investigator has set up in his own mind as representing the normal condition. All this concentrated attention directed to an organ which is three inches long, two inches broad, an inch thick, and which weighs from an ounce to an ounce and a half. . . . . .

I should be sorry if anything I have written should give you the idea that I have not a very high regard for your profession. I admire this never satisfied spirit of investigation which possesses so many of you medical men very much. It is a grand endowment, and too much cannot be said in praise of its efforts and achievements, only, I think I have been receiving a little too much of its attention lately. How would it do to have a little change? Suppose you try the plan of resting yourselves by changing the field of inquiry. Now, there is my friend at the other end of the avenue, the Hymen. Why not take that up as a subject of investigation? Here we have blood vessels, and nerves, and mucous membrane, and epithelium; surely there must be some pathology where we have so many of these. Then it is constantly exposed to injuries of various kinds—lacerations even. These alone would furnish a fine field for such of you as may be fascinated by such dreadful things.

Then there are my neighbors, the Ovaries—no, I'd rather not—that's a little too near home. But there are the liver and kidneys, and a dozen other organs; organs, too, which are complicated in structure and function, and which you cannot get at very readily to do harm to; these will bear any amount of scientific inquiry, and, by engaging in it, you stand a much better chance of advancing the claims of your profession than you will by poking around me all the time. And there is the nervous system. This is another fine field; perhaps, the most promising—certainly the most mysterious of all, and I am strongly of the opinion that if it is diligently worked you will find here the origin of the greater part of the mischief which you now attribute to me. . . . . .

To be candid, I don't care what you do, or what organ or system bears the brunt of your scientific questioning, just so I escape. I have become the embodiment of undiluted selfishness. All other organs may defend themselves as best they can. They never tried to help me any, and I am not sure that some of them haven't done what they could to get me into trouble.—*Col. and Clin. Record.*

SPRAINED JOINTS.

BY EDMUND OWEN, F.R.C.S.

A sprain is the result of a twist or wrench which has stretched the fibrous capsule of an articulation and its synovial membrane, but which has not sufficed to cause either fracture or dislocation. The injury should be treated upon exactly the same surgical principles as those which guide us in dealing with a fracture or dislocation of a joint; yet a joint which is only "sprained" is somewhat apt to obtain but scant professional attention. Though the common saying teaches that "A sprain is worse than a break," the unfortunate subject of a sprain is usually contented with doing the best that he can for himself with arnica, cold water, or oil, as chance, experience, or advice may suggest, seeking the surgeon's aid only for the remote and often intractable complications. In unhealthy subjects, and especially in children, want of treatment often entails articular troubles which run a lingering course and may end disastrously; and even with the strong a severe sprain is apt to involve a long-continued enfeeblement of the part.

Immediately after a sprain there is a want of pliability in the joint, due in part to the pain and tenderness caused by the violence, in part to the tension of the sensory nerve filaments from the sudden effusion, and in part also to the mere mechanical effect of the presence of blood and other fluids in and around the joint. In certain situations a serious wrench of an articulation may give no visible sign upon the surface of the body; especially is this the case with the hip, the shoulder, and the spinal articulations, all of which are thickly covered; stiffness will then be the only objective sign indicative of the lesion.

If a joint in the lower extremity be seriously sprained, temporary but absolute rest should be secured by, if practicable, putting the patient at once to bed; by raising the limb on a pillow or in a swing cradle, until the heel is above the level of the chin, so as to hinder capillary and venous congestion, and by applying firm and even compression. I am convinced that judiciously applied compression not only checks effusion, but also promotes the absorption of fluid which has already been poured out, and as a rule the patient experiences immediate comfort from it. At times, however, it is possible that from tenderness of the skin or from mere apprehension, the patient will not submit to the compression immediately after the injury. Then one must be content to apply either the ice bag or an evaporating lotion. Cold plays a double part: by stimulating the vaso-motor nerves it causes a contraction of the small arteries, with the effect of checking further hemorrhage and inflammation and limiting the effusion, and by numbing the sensory nerves it diminishes pain. The lotion should not be used, however, as is often done, as a water dressing under oil silk. It must be applied on a single fold of lint, with the fluffy side outwards, so that evaporation may proceed with energy. The lint should never be allowed to get dry, nor should the limb be covered with the bed clothes.

If a man sprains his ankle while out in the fields, it should as quickly as possible be put into running water, and then be firmly bandaged with strips of wetted handkerchiefs; the boot should be worn, if he can get it on again, for the sake of the compression it affords, but it is better not to re-

move the boot at all until the joint can be bandaged.

Nothing short of absolute rest in bed suffices when a child sprains a joint in the lower extremity; he must not be trusted to lie on a sofa, for he would soon be off it. Where the hip-joint is sprained, the limb should be raised and rest insured in the extended position by the application of the weight and pulley, so that if matters do not clear up there will be no need for further change of position. A sprain is often the beginning of an attack of hip-joint disease.

In the case of the knee being sprained, the leg would be extended; in case of the ankle being sprained, the foot would be put up at a right angle. But in each instance the limb should be carefully bandaged upwards before the compression is applied, or œdema may follow; complete rest would be still further insured by adjusting a splint to the back or side of the limb. Compression may be applied by means of a roller of domette, or by the additional aid of plastic splinting moulded on. With children a well padded, flexible metal splint is of great service, but a casing of plaster-of-Paris and house flannel answers even better.

I have at present two men under my care each with a severely sprained ankle, the part being swollen and discolored and the foot stiff and useless. The foot and leg have been immobilized in well-lined plaster-of-Paris casings, and thus the patients are quickly enabled to get out of bed and go about with crutches, without risk or discomfort. In neither of these men was a fracture to be detected.

When an ankle is greatly swollen from a recent injury, and signs of fracture are not evident, it is not advisable to conduct the examination for obtaining a knowledge of the exact nature of the injury in too inquisitive a manner. If the limb be treated on the principles enunciated above, it will be well either for a severe sprain or a fracture without displacement. Possibly the patient might be unsettled at not being definitely informed whether there be fracture or not, for the oft repeated question of the patient or parent as the surgeon examines the part is, "is the bone broken?" But I am speaking merely of the principle involved in the surgery.

Absolute rest is demanded as long as heat of the surface and intra-articular pains persist. As the pains subside recourse must be had to frictions and rubbings and the use of stimulating liniments and cold douches. The rubbings should be executed always in the direction of the venous and lymphatic return, and may be combined with firm fingering about the part and the rubbing in of olive oil. When effusion persists over the painless joint, one may apply over the joint the even compression of a Martin's elastic roller for a certain length of time each day, the skin being duly protected by a soft covering. This is a highly satisfactory method of treatment in cases of chronic thickening and effusion. Leslie's soap strapping, too, when evenly and liberally applied over a sprained joint, is an excellent therapeutic measure in the days following close upon the injury.

At other times nothing seems to render such efficient aid as a wetted calico bandage. Compression in some form is needed.

On physiological grounds the early treatment of a sprained joint by poultices or fomentation is inexpedient. The application of warmth produces a vascular fullness of the part, and a relaxed condition of the tissues which are in need of being toned up and strengthened; though if synovial inflammation of an acute kind follow the sprain, leeches and fomentations may not improbably be indicated later on. For the promotion of the absorption of the lingering products of effusion, an alternation of douchings under streams of hot and cold water gives valuable aid. In no stage of the pathological process associated with a sprain should arnica solution be applied. One has met with instances in which painful and serious cellulitis has followed its use, even where there has been no previous lesion of skin. How is it that arnica has earned its reputation in the treatment of sprains, and how has that reputation managed to survive so long?

A surgeon was driving his wife in the country when the pony fell and the occupants of the carriage were thrown out into the road. When I saw him a few hours after the accident, he was wearing his right arm in a sling, the elbow being at an obtuse angle. He said that in the fall the right hand (in which he was holding the reins) and the arm were doubled and twisted underneath him, and that though he was sure no bone had been broken, he could neither bend nor straighten the elbow on account of the severe sprain it had received. He said that on his way home, and certainly well within an hour of the fall, on placing his left hand under the damaged elbow, he found a soft swelling which seemed pretty nearly as large as an egg; his wife could also feel it through his coat sleeve. Having taken the limb out of the sling and removed some water dressings, universal and extensive effusion in the articulation was evident; the distended synovial membrane was specially bulging about the head of the radius. The intra-articular pain was intense. There was no contusion of the skin nor any definite ecchymosis; movement caused great distress.

Beginning at the fingers, we firmly bandaged the extremity with a roller of domette (which from its softness and elasticity adapts itself with delightful evenness and comfort), drawing the turns which surrounded the swollen joint itself more closely and firmly for the sake of compression. Then, having bent to the proper form of the arm a padded, flexible iron splint, and carefully ad-

justed it, the elbow was packed round with cotton wool, and having enclosed all in a second and wider domette roller, and having got the patient to bed, we arranged the arm upon a pillow. The compression and the security afforded by the roller and the splint gave great satisfaction. On the second day we readjusted the splint and the bandages, which had now become slack. Most of the tenderness and swelling had departed. Two days later and at other intervals we tightened the bandage, finding always steady improvement. In ten days the splint was removed and cautious use of the arm was allowed, but for the entire removal of the stiffness a course of shampooing from a professional rubber was resorted to. The effusion which had come on so quickly, within an hour of the injury, was evidently not inflammatory in its nature; probably it consisted of synova, blood and serum.

The other occupant of the carriage had severely sprained her left ankle, which was painful, stiff, and full of sero-synovial effusion. There was no fracture. The swelling was confined within the limits of the synovial membrane; it did not extend up above the external malleolus in the manner so characteristic of Pott's fracture. The treatment adopted consisted in surrounding the ankle with an even layer of cotton wool and in bandaging from the metatarsus upward with a soft roller, the turns of which were continued well up the calf of the leg. The foot thus firmly encased was raised upon a pillow. In a few days all the excess of synovial fluid had disappeared, but the firmly applied bandage was still worn. In a week she began to use her foot, and was finding comfort in having it and the ankle rubbed with oil several times during the day. On the occasion of my first interview the patient volunteered the important clinical statement that after the accident her foot and ankle were fairly comfortable until her boot was removed. Probably if a bandage of plaster of Paris casing could have been applied immediately after the accident, but little effusion or œdema would have occurred. Certainly compression of a recently sprained joint gives results, both as regards expedition and thoroughness, with which those obtainable by the system of evaporating lotions cannot be compared.

If the sprained joint be in the thumb or finger, much pain and want of pliancy may result. A small splint should be moulded on; firm compression with a pad of cotton wool and a soft bandage exercised; and the hand worn in a sling—it should not be left free except for the cold douchings. A few days' absolute rest is expedient.

Even long years after all the local signs of a sprain have passed away, a jerked or sudden movement of the joint, or a change in the weather, reminds the subject that the part is not absolutely sound. Nearly twenty years ago, I severely sprained my left wrist at football, and to this day it has not absolutely recovered. I cannot flex or extend it as I can its fellow. A sudden movement of it is often accompanied with audible crackling and discomfort. From a close and interested observation of this joint I feel convinced that in the crevices between the articular surfaces of the bones, and against the attached parts of the capsule out of the way of pressure, there are growing delicate and injected fringes of the synovial membrane. The synovial fluid is thin in quality and in excess of the normal amount; there are no adhesions inside the articulation, but there is probably some shortening of the extra-articular fibrous tissues which were implicated in the inflammation—a shortening secondary to inflammatory thickening. Probably this shortening of the fibrous tissues plays the important *role* of a perpetual splint shielding the enfeebled synovial membrane from further shock and distress. On no account therefore, will these adhesions be broken down or stretched by manipulation; such a treatment is contra-indicated by the pain which closely attends any attempt at more than the accustomed movements of the joint. The very audible crackling, which even a bystander may sometimes hear on working the joint, is the result of the altered synovial fluid being quickly driven by the movements of the joint between the vascular fringes.

Occasionally when a joint has been wrenched by a recent accident, and is in consequence painful and useless, the manipulative examination which it receives from the surgeon is the means of removing much of the pain, as well as of restoring a good deal of the lost function. I am satisfied that such improvement is real, and not merely subjective. Yet because in the weakly and ailing such a therapeutic measure might probably be attended either immediately or remotely by disastrous results, and because of its utterly speculative nature, it is not to be recommended as routine practice, though it may well be kept in reserve for rare and special occasions. It certainly has a close and important bearing upon the question of bone-setting. A man sprains his ankle; the surgeon examines and reports accordingly; but, because no bone is broken, he perhaps speaks of the lesion in a careless or off-hand manner, and does not insist on the necessity of rest and of other appropriate treatment. So the ankle does not get sound, and the faithless patient resorts to a quack, who at once find "a small bone out of place." Then come a sudden twist and a crack, and lo! "the bone is in again." The patient believes that a bone has there and then been restored to its place because he is at once absolutely more comfortable, and can not only move the joint freely, but can even accept the advice to throw away his crutch or his stick, and walk on his damaged foot without further help. Perhaps he is told to go home and apply ice; and at any rate from that time he con-

siders himself to be and indeed is—cured. Forcible manipulation is, of course, the bone-setter's panacea. I have known him employ it in the case of fracture of the surgical neck of the humerus, and as may be expected, with very serious results. In the case of recent sprain, however, the patient cannot but believe that the bone-setter's statement is true, because, beyond a doubt, his manipulation has proved effectual.

The following report illustrates the point: A gentleman of highly nervous temperament came to me with considerable bruising of the deltoid, the day after receiving a fall which might have been attended with much more serious consequences. The arm was so stiff at the shoulder-joint that he could not raise it to dress himself, nor could he touch the ear of the opposite side whilst his elbow was brought towards the front of the chest—it remained permanently though slightly abducted. Any movement of the arm was attended with pain and distress. There was no definite hollow beneath the acromion process, nor any other unequivocal sign of discoloration. There was a great element of obscurity in the case; the patient was in pain and apprehension, and expressed his fear that the shoulder-bone was "out."

A consultation on the case was not obtainable, and the course of action had to be decided. So, to err upon the safe side—if error there might be—and in order to make a thorough and practical examination of the joint, I agreed with him that there was "displacement of the shoulder-bone," and laying him upon the floor, with my heel in the axilla, I flexed the fore-arm to slacken the biceps, rotated and pulled down the arm, and then adducted it *vi et arte* and in a most determined manner. There was no click, or the sign of a readjustment having taken place, but immediately on the patient rising from the ground he said that he was much more comfortable; he had lost most of the pain; he could move his arm with comparative freedom; and to his delight, and my satisfaction, he dressed himself without assistance. He was convinced that I had reduced a dislocation. In my own mind I was sure that I had not, but for obvious reasons I did not tell him that the success attending my treatment was worthy of a more exact diagnosis. It is with no sense of pride that I record the case; nevertheless, it might be expedient to adopt this treatment on another similar occasion. With a hyper-sensitive and nervous patient, and a fat or swollen shoulder, it is occasionally impossible to affirm, without the aid of an anæsthetic, that there is no displacement. Traction on the bent elbow, with the heel in the axilla, enables the surgeon to make the necessary examination. Certain am I of this,—that my nervous patient would not have allowed me thoroughly to examine him if I had first said that I thought there was no displacement.

I have observed the same course of events in other cases. For instance, a man has just damaged his ankle, which is now painful, swelled and stiff; a thorough manipulative examination reveals no definite lesion. But immediately after the handling the patient finds the foot so much better in every respect that he talks too lightly of his injury and wishes at once to walk about. Or an elbow, knee, or wrist is stiffened by a wrench. On being thoroughly overhauled, nothing is found absolutely wrong with it; but the patient, though a sufferer during the examination, finds the joint greatly improved by it. The surgeon will rightly refuse to include such a speculative therapeutic measure in his routine practice; but its blind employment by the charlatan is the means of securing many a triumphant success.

Where a limb is stiff from chronic muscular rheumatism, much good may often be done by *massage*, and by sudden movements imparted to it, the stiffness disappearing by magic, whilst no harm can follow the treatment.

Stiffness may follow on a sprain from effusion taking place, not into the synovial membrane of the articulation, but into a sheath in connection with a neighboring tendon. One has often to treat such effusion in the sheaths of the extensors of the thumb and wrist, and also in those of the tendons of the tibial muscles and extensors of the toes. It is, of course, easy to differentiate between an articular and a thenar effusion; the same principles direct the treatment in each case. I have, at the present time, under my care, a wrist which is stiffened from slight effusion into the sheath of the radial extensors; great relief is being afforded by the firm compression and support of a domette roller which is kept constantly wet.—*The Practitioner.*

PUERPERAL SEPTICÆMIA AND ITS TREATMENT.

To comprehend fully the present condition of our knowledge of puerperal septicæmia, we must go back to the suggestive paper by Sir James Y. Simpson, "On the Analogy between Surgical and Puerperal Fever." More recent scientific investigation has worked along the lines of this analogy, and the results have proved that it rests on a sound pathological basis. These results promise to carry us further, and establish not only analogy but identity.

The next important step was the discovery by Pasteur in 1857 of the lactic-acid ferment, which gave birth to the germ theory of disease. This theory found in the hands of Sir Joseph Lister its most fruitful application to surgery, and it was only one step further to carry it into the province of obstetrics. Nothing is more remarkable than the eagerness with which practical obstetricians have seized hold of the principles of antiseptic

treatment laid down by Lister; the only misfortune is that our treatment has shot so far ahead of our pathological data that we may expect a reaction similar to what has occurred in the province of surgery. These data are, however, being slowly accumulated, mainly through the work of Pasteur and those who work under him.

Although we must wait for further investigation to determine the exact relation of germs to septic poisoning, there have been established the very important facts that we *have the same pathological changes in puerperal as in surgical septicæmia, and that these hold exactly the same relation to the germ theory.* In most cases of puerperal fever we have simply to do with blood poisoning from unhealthy wounds, identical in pathology with the blood poisoning from an unhealthy condition of the wound after an amputation. The constitutional symptoms are, of course, modified by the pueperal condition, just as the local changes are affected by the peculiarities in the anatomical structure of the post-partum uterus—the condition of the tissues lining its cavity, its enlarged veins and lymphatics, and its hypertrophied parametric tissue. In a former paper I described the normal condition of the tissues in the post-partum uterus, and here we need only point out what a favorable soil the breaking down tissues of the placental site offer for the growth of micro-organisms, and how the removal of the epithelial covering from the whole of the interior of uterus and cervix uteri favors sceptic absorption. That sceptic poisoning does not oftner occur is probably due to accurate apposition of the anterior and posterior vaginal walls (following the expulsion of the uterine contents), which prevents the entrance of germ-laden air, and also retards the growth of those organisms which, as Pasteur has shown, require air for their development. The fact that the epithelium of the vagina is not detached by the passage of the child is significant, as this will prevent septic absorption from taking place through its walls except when lacerated.

The practical conclusion from the foregoing is *that the condition of the interior of the uterus should occupy the same place in the mind of the obstetrician that the stump does in the mind of the surgeon.* The condition of the lochia gives valuable information as to the state of the uterine wound. We must remember, however, that we may have septic absorption going on without fœter of the lochia, as we have seen in one case. We must distinguish between putrefying matter (which will, of course, produce fætor) and septic matter: *all putrefaction within the uterus after delivery will cause septic poisoning, but not all septic poisoning implies putrefaction.* We have a pathological basis for this distinction in the difference between the microbes characteristic of putrefaction and those described in septicæmia.

The germ theory receives confirmation from the fact that those substances which have been shown to be most effective in destroying micro-organisms have proved most useful in treating septicæmia. It is established beyond question that the washing out of the uterus with antiseptics in cases of puerperal fever is followed by the most remarkable results. Till recent years carbolic acid was the most favorite antiseptic, but corrosive sublimate possesses so many advantages that it is gradually replacing it. Koch's experiments have shown that the latter is much more destructive to microbes. The spores of anthrax bacillus would still grow after immersion for seven days in a 2 per cent. solution of carbolic acid, as also they did after immersion for a day in a 5 per cent. (1·20) solution. But after immersion in a solution of 1-10,000 of corrosive sublimate for from 5 to 60 minutes, the same spores become sterile; in fact, immersion for ten minutes in solutions up to 1-20,000 also sterilised the spores. He places the limit of the action of the sublimate on the spores of anthrax bacillus as lying somewhere between a 1,20,000 and a 1-50,000 solution. His experiments on mice were very interesting. Three spore-laden threads were dipped for ten minutes in solutions of 1-10,000, 1-20,000, 1-50,000 respectively, and then introduced beneath the skin of different mice. The 1-50,000 mouse died next day, as rapidly as if the spores had been fresh. The 1-20,000 one died on the fourth, the 1-10,000 on on the fifth day. These last showed, therefore, an extraordinary prolongation of the period of incubation, which may fairly be attributed to the action of the sublimate. The same experiment was repeated with the difference that the spores lay for one hour instead of ten minutes in the solutions. The 1-50,000 mouse died in forty hours; the 1-20,000 mouse died in three and a half days; the 1-10,000 mouse survived. "Sublimate is, therefore, the only one recognised of all antiseptics which possesses the very important peculiarity, that it kills by a single application of a comparatively weak (1-1000) solution for a few minutes all, even the most resistant, spores of micro-organisms; even with a solution of 1-5,000, a single dipping was sufficient."

Another advantage of the corrosive sublimate is its portability. Owing to its solubility in the presence of chloride of ammonium, we can have a very concentrated solution. At Dr. Hart's suggestion, Messrs. Duncan and Flockhart have prepared a solution of 16 per cent.; so that one drachm added to a quart of water gives a solution of 1 in 2,000, which is an efficient antiseptic. It is made up in special bottles provided with a glass cup of one drachm capacity fixed to the cork. Those engaged in obstetric practice will find it a great convenience, as it can easily be carried, and can also be ordered for use by the nurse where it

is desirable to have antiseptic injections given daily during the puerperium. A great deal has been said against corrosive sublimate owing to toxic effects which have followed in a few cases. Koch has, however, pointed out that its action on germs is so rapid that long immersion is not necessary. The practical application of this is that in cases where we might be afraid of too much absorption of the sublimate an injection of water might be given immediately after the antiseptic one without diminishing the effect of the latter. After a vaginal injection given in the dorsal posture, a considerable quantity of fluid may remain in the vagina so long as the patient remains in that posture. This fact and the lacerated condition of the cervix may explain the absorption with toxic results which has sometimes been observed. The 1 to 2,000 solution is now widely used in this country, and we have never heard of any bad effects.—*Ed. Med. Jour.*

AFFECTIONS OF THE JOINTS WHICH COMPLICATE OR FOLLOW SCARLET FEVER.

It serves a useful purpose at times to take stock, as it were, of some group of allied diseases and, while refreshing our memories with the collective wisdom of the past, to compare with it whatever personal knowledge or experience we may have to add to the common store.

With this end in view, I propose considering an important group of complications which are apt to be associated with a disease which has much of interest and importance for every practitioner of medicine. Scarlet fever is truly many-sided, and claims our interest, not only in consequence of its infectious and fatal character, but also on account of the many complications which attend it, and the sequelæ which may supervene when the disease has spent its force.

It has been known since the beginning of the century that in some epidemics of scarlet fever the joints become affected; but it is only in later times through the writings of Underwood, Betz, Trousseau, Henock, and others, that we have any definite information concerning these affections, or any attempt to clear up their pathology.

Trousseau, in his clinical lectures, calls special attention to what he designated "scarlatinal rheumatism," stating that it occurs much more frequently than is generally believed; and he does not appear to doubt its identity, or, at least, close relationship with acute rheumatism, though he notes some of its most important eccentricities. His description has been largely followed in our own text-books, though the accounts given have been meager, most writers, like Bristowe, remarking that scarlet fever is at times followed by rheumatism, which does not differ from the ordinary kind, though noting the fact that suppuration occasionally occurs. The opinion that the common form of joint-lesion occurring in scarlet fever is due to the rheumatic diathesis of the patient, rather than to any synovitis produced by the scarlatinal poison, has been commonly held by continental and English writers; and in a discussion which took place at the annual meeting of the Brit. Med. Assoc. in Liverpool, in 1883, scarlatinal was held to be essentially the same as the ordinary form of rheumatism. In a short paper which I read on that occasion, I tabulated some cases which had come under my care, and pointed out that they supported the belief that one form at least of the joint affection is connected rather with a septicæmic than with a rheumatic condition. A further experience has made it clear to me that the difference of opinion which existed on that occasion was due to the fact that the difference of observers had really been observing different diseases; that while my cases were all confined to those seen in the fever-ward of a children's hospital, those described by the physicians who took part in the discussion were rather those of adults who had recently recovered from scarlet fever, the former being septicæmic in nature, the latter being true rheumatism.

It may, perhaps, be worth our while to analyze the various forms of joint affection which may occur in connection with attacks of scarlet fever. They may be divided thus: 1. Synovitis; 2. Acute or chronic pyæmia; 3. Acute or subacute rheumatism; 4. Scrofulous disease of the joints.

Synovitis.—Of this form I have notes of twenty cases that have come under my care in the last few years, in which there was a more or less acute inflammation of the joints, and which subsided in a few days without going on to suppuration. It is not easy to say how frequently it occurs, or what percentage of cases of scarlet fever suffer from it, inasmuch as it is much commoner in some epidemics than others. It not unfrequently happens that two of the same family suffer from it. In four out of every twenty cases it was followed by nephritis. It is important to notice that it rarely supervenes in mild cases; at least, such is my experience, though true rheumatism does appear often after light attacks. In my own cases the attacks of fever were certainly severe, the throat symptoms well marked, and an elevated temperature was maintained beyond the average. In an uncomplicated case of scarlet fever the temperature goes down toward the end, or, at least, well within the limits of the first week, the rash disappearing and the throat regaining its natural appearance. Among my own cases, in no one of them did the temperature fall to normal and remain so during the first week, but the fever continued into the second and third weeks, caused in

nearly all instances by the severity of the throat complications. Thus, the tonsils were excavated, or sloughly, the mucous membrane of the nose joined in the inflammatory catarrh, the lymphatic glands were swollen, and often surrounded by cellulitis.

In four of the cases, excluding one who died on the ninth day, the temperature fell to normal within a fortnight; in the remaining fifteen the febrile symptoms did not abate till the third or fourth week. It thus clearly comes out that the synovitis appertains to those cases in which the symptoms are severe, and the fever unduly prolonged by the ulcerative and sloughy condition of the tonsils and soft palate. Of the twenty cases, two were fatal, one on the ninth, the other on the twenty-fourth day. The joints which were most commonly attacked were the wrists and finger-joints, the inflammation often involving the synovial membranes of the flexor and extensor tendons in the palm and back of the hands. The knees and ankles were frequently involved, and, with the latter, the soles of the feet; the hips and shoulders were less affected; movements of the head and neck caused acute pain. For the most part the joints were painful on movement. In no one of these cases was there any definite cardiac complication (see *British Medical Journal, loc. cit.*).

In some few cases the wrists only, or knees only, were affected. In one case the synovitis became chronic in the knees, the effusion lasting for several weeks (sixtieth day), but eventually the fluid was absorbed, and the girl quite recovered. In two other cases the synovitis remained exceptionally long, in one case lasting from the seventh to the twenty-second day, and in another from the eighth to the seventeenth; in five only did the pain and tenderness last beyond the week; in the remainder the patients were free from pain in two to five days.

In the majority of cases the synovitis supervened at the end of the first week or beginning of the second, the earliest commencing on the fourth day of the fever, and the latest on the thirteenth, fifteen out of the twenty beginning from the sixth to the ninth day. This knowledge that synovitis nearly always commences at the end of the first or beginning of the second week may be an important element of diagnosis, inasmuch as true rheumatism, when it supervenes, generally does so during convalescence, or, in some cases, at the very commencement of the attack.

The drug commonly given directly the joints became painful was salicylate of soda. It is difficult to estimate its effects on a disease which is, as a rule, so fugitive as scarlatinal synovitis; and I am inclined to think that, in some cases, where the patient was quickly free from pain, this was only the natural course of events, and was not due to the treatment employed.

It must, I think, be tolerably clear from the foregoing account that there is good reason for classing this joint affection outside the pale of what is ordinarily termed acute rheumatism. On the other hand, the symptoms point to a condition which may be termed "scarlatinal septicæmia," arising from the absorption of putrid matters from the ulcerative or sloughing process going on in the throat, and resembling the acute or chronic septicæmia in puerperal cases, gonorrhœa, ophthalmia, or diphtheria.

That synovitis differs essentially from rheumatism may be seen by a consideration of the following points:

1. Synovitis is more common in some epidemics than in others, and occurs more especially in those cases where the febrile stage is prolonged on account of the severity of the throat affection.

2. The joint lesions nearly always supervene at a definite stage of the attack, namely, at the end of the first week; a fewer number of joints are affected than in acute rheumatism; the attacks are more fugitive, and rarely occur.

3. Pericarditis and pleurisy are not common, and endocarditis is very rare.

It must appear tolerably certain that if these attacks were really rheumatic, the scarlatinal poison bringing into activity the latent rheumatism, the frequency of the attacks would not vary with the epidemic, or supervene so constantly at one period, or, above all, would so rarely give rise to peri-endocarditis, as it is well-known that an attack of acute or subacute rheumatism during childhood only exceptionally spares the heart.

Acute or Chronic Pyæmia.—I have already spoken of scarlatinal septicæmia resulting from the absorption of septic matters from the throat; but, in addition to this condition, there is unquestionably a further stage in which phlebitis, septic embolism of various organs, abscesses in the joints, and purulent inflammation of various serous membranes, takes place. Pyæmia is by no means uncommon in scarlet fever, yet it cannot be said that suppurating joints often occur. I have only seen three such cases. In one case, which was fatal on the nineteenth day, there were *ante-mortem* clots in the right internal jugular vein, infarcts in the spleen, minute abscesses in the kidneys, and sup puration in both ankle-joints. In a second case, there was suppuration in the distal joint of the thumb, in a boy who died on the fifteenth day. In a third case, in a boy aged 2½ years, in which recovery took place, there was redness and swelling in the finger-joints on the eleventh day; the next day, pain and tenderness in the knee and ankle; on the fifteenth day, two ounces of pus was let out from the knee; and on the twentieth day pus was evacuated from the palmar surface of the hand.

Acute and Subacute Rheumatism.—Whilst, in children, at least, by far the commonest joint affec-

tion in scarlet fever is the synovitis above described, yet it must be admitted that true rheumatism does sometimes complicate scarlet fever, and is apt to follow during convalescence. What part the effects of the scarlet fever poison plays in producing or calling latent rheumatism into activity, it is difficult to say; it is possible that the tissue-waste leads to an accumulation of effete materials in the system, which, in those prone to rheumatism, brings about an attack. An attack of scarlet fever certainly does seem at times to stir up an attack, or a recurrence, of joint-pain or peri-endocarditis. Thus, in four cases which have come under my notice, who had previously suffered from endocarditis and rheumatism, and who contracted fever, the attack was quickly followed by joint-pain, pericarditis, or erythema nodosum. In one case, John M., aged 9, who was admitted on the eighth day of an attack of scarlet fever, a pericardial rub was detected as well as mitral disease, which latter was evidently old; a few days later, there were joint-pain, and an eruption of erythema circinatum.

In another case, M. E. J. B., aged 13½, admitted to the general wards for acute rheumatism and endocarditis, during convalescence, when she had been free from pain for two or three weeks, contracted scarlet fever. On the fifth day there was a recurrence of rheumatism in the joints; and on the ninth day pericarditis occurred.

In another case, Eleanor H., aged 5, admitted for mitral disease, having suffered from rheumatism six months before, contracted scarlet fever. There was a pericardial friction-sound heard the same day; and on the fifth day there was an erythematous rash. Two brothers, aged 8, and 10 years old, suffered from a mild attack of scarlet fever; during the fourth week, when they were up and about their room, and still desquamating, they began to complain of pain in their joints, which, however, was never severe, and also pain in the region of the heart, with dyspnœa. Both quickly developed both mitral and aortic *bruits*, and later on pericarditis; one died within three weeks, and the other within five weeks of the commencement of the rheumatic attack. Both evidently suffered from acute or malignant endocarditis. Such cases are of great importance and easily mislead, especially as the joint-pains may be comparatively slight.

Scrofulous Disease of the Joints.—Disease of the hip, or of other joints, is not, as far as I have seen, a common sequence of scarlet fever, though it is quite possible it may happen oftener than I think as the cases occurring would gravitate to the surgical side. Presumably the weakened condition of health produced by the fever predisposed to tubercular disease of bone or other organs. There can be little doubt that an attack of scarlet fever, as a rule, greatly aggravates chronic disease of joints which has already become established. Suppuration quickly takes place in a perhaps hitherto quiescent hip-joint, and possibly a condition of septicæmia or pyæmia supervenes. It seems probable that sometimes a joint which has suffered from scarlatinal synovitis may become the seat of chronic disease, though I cannot say I have ever been certainly able to trace out such a sequence. Much of the variance of opinion with regard to the rheumatic or septicæmic origin of the joint-lesions in scarlet fever has, no doubt, originated from the fact that observers have been describing the different forms which occur. Personally, I have no doubt that the form which occurs most commonly in children is of septicæmic origin, and rarely leaves behind any damage to the heart; but it is also certain that an attack of scarlet fever will sometimes cause a recrudescence of true rheumatism, or in some way predispose, so that an attack supervenes in the course of the patient's convalescence.—*Dr. Ashby in British Medical Journal.*

THE RELATIONS OF THE MEDICAL PROFESSION TO THE USE AND ABUSE OF ALCOHOLIC LIQUORS.

While I have no adverse word for what are called temperance or total abstinence organizations, I do not speak as their representative, having no connection with them and not being bound by any pledge to advocate their views or practise their prohibition, but what I have to say upon this occasion is from a purely professional standpoint, and is intended to be a discussion of the use and abuse of alcoholic liquors as strictly related to the science and art of medicine.

Dr. N. S. Davis, as the results of his own careful experiments and observations, combined with the experimental researches of a number of medical men in England, France, and the United States, has formulated the following propositions:

1st. That alcohol, when taken diluted in the form of fermented or distilled spirits, is rapidly absorbed without change, carried into the blood, and with that fluid brought into contact with every structure and part of the human body.

2d. That while circulating in the blood its presence retards those molecular or atomic changes by which nutrition, disintegration and secretion are maintained and the phenomena of life continued.

3d. That its presence retards the elimination of waste matter, impairs nervous sensibility, lessens muscular excitability, and lowers the temperature of the body.

4th. That a part at least (and from the testimony of other observers, I would say the whole) of the amount taken in is finally eliminated or thrown out of the system with the excretions without having undergone any appreciable chemi-

cal change. As he further remarks, "these facts are as well established as any in the domain of physiology or in the whole field of natural science, and they point, with all the clearness and force of a mathematical demonstration, to the conclusion that alcohol is in no sense food, neither furnishing material for the tissues nor fuel for combustion, nor yet generating either nervous or muscular power." But, on the other hand, I would remark that it is essentially a poison, antagonizing some of the most important interstitial changes upon which the vital forces are dependent, and is the fruitful source, when habitually used, short of intoxication, of the most serious and fatal diseases which the physician is constantly called upon to treat, which can be exhibited most fully by numerous facts readily drawn from the standard literature of the profession. In reply to the second question, as to any compensating advantage to the human family in the relief of disease for the incalculable injury inflicted in the production of disease and the demoralization of humanity by the countenance given to its use and traffic through its recommendation as a medicinal agent, I would say that there is, in my judgment, no conclusive evidence that alcohol has any more power in rectifying morbid processes and removing disease than it has in promoting the vital processes in a state of health. I will go still farther and assert that alcoholic liquors, whatever may be the undemonstrated advantages, have no absolutely defined place in therapeutics and cannot be proven to occupy any distinctive or legitimate position as agents for the treatment of disease; that there are the most discordant, loose, and undefined views in our approved medical works as to their application, and practically no exact therapeutic rules clearly established as to their *modus operandi* in special diseases, or as to the quantity in which they are to be administered, and thus lacking all recognized essential elements of approved and reliable medicinal agents. While this is to a great extent true in regard to simple alcohol, it is to a much greater extent true in reference to brandy, whisky, rum, gin, wine, and the legion of malt liquors, all of which are prescribed by medical men, and the people, following their example, with the most reckless disregard to the systematic and and definite purpose supposed to properly belong to the use of agents which have obtained a fixed place in the materia medica.

I have for a number of years condemned its use in consumption, as not only not beneficial, but as absolutely injurious, by the aggravation of the malnutrition, which is one of the most conspicuous and essential elements of the disease; and it is now asserted with confidence, to which I am strongly disposed to accede, that its use is really in some cases the cause of certain forms of the disease. The tendency manifestly is, among some of our most intelligent medical observers, to abandon its use in this disease, and thus drive it out from one of its principle strongholds. I think I can say with perfect candor, in a very laborious and extended professional life, I cannot recall a half dozen instances in which I really believed that life has been saved by alcoholic liquors, and the inclination of my mind is strongly toward the conviction that the time will come, at no very distant day, when alcohol in any of its forms will no longer be recognized as a medicinal agent, beyond its value as a menstruum, extractive and preservative agent, or as the source from which may be obtained some one or more innocuous and possibly beneficial elements.

While individually I do not hesitate to say that I would greatly rejoice in the exchange of the present status of alcoholic preparations for their entire extirpation, believing, as I do, most solemnly, that their use, even by physicians in the unsettled and unscientific manner in which they are largely prescribed, is an infinite evil, and we are not in any way compensated by whatever of good is derived therefrom; yet I fully recognize the fact that many intelligent and reliable physicians, who have my respect, regard alcoholic liquors in some form as important to them in the discharge of their professional duties. I fully recognize the fact, whatever I may individually think of the present use of alcohol or anticipate of the future, as already indicated, that the time has not arrived, and may never come, when the State can deny to the physician the use of simple alcohol, based as it is upon his perfect right to the exercise of his best judgment with the most perfect independence, within the limits of professional approval, in the selection of remedies for the treatment of disease. But if it is indispensable and must be furnished, let it be done under such restrictions and under such supervision as obtain in regard to the sale of other poisons, and as will lessen to the greatest possible degree the liability to a perversion of the privilege, even if it should be necessary to appoint and hold accountable its own agents.—Dr. Logan, *Atlanta Med and Surg. Rep.*

EVOLUTION IN PATHOLOGY.

It needs no foresight to see that pronounced significance will ere long be attributed to the Darwinian aspects of pathology. There has, perhaps, been some tardiness in applying the all-embracing principles of evolution to phenomena, which fall within the special cognisance of the pathologist; but progress in this direction has been made, and, though slow, it has been sure.

Already in this connection several lines of thought have been taken up; and, carefully followed, they promise results of the greatest interest.

Many have been recently recorded in this journal. It has been suggested that enchondromata of the limbs of man and of many animals are growths homologous with structures which always exist in the selachian fin, and that many other so-called abnormal developments may be regarded as instances of reversion. Darwinism teaches that the developmental history of the individual is an abbreviated history of the development of the race to which the individual belongs; and the above suggestion concerning the homology of certain enchondromata is one which arises out of a consideration of the supposed ancestral history of man. Regard, too, must be paid to the inter-reactions of incident forces and living things, for such inter-reactions are largely operative in the production of varieties. There are, in fact, two sets of factors—heredity and environment—concerned in the coming into being of new forms of life. And in the coming into being of new diseases, Sir James Paget has pointed out how these factors are to be considered. There is, again, the matter of correlation (correlation of structures and association of functions), to which Darwin drew special attention; and it seems that a knowledge of it, also, is of profound importance, as serving to throw light upon facts of everyday clinical experience.

Another Darwinian line of thought has been forcibly presented by Dr. Aitken. It has for many years been maintained that close genealogical, or, at any rate, gradational, relation exists between the *materies morbi* of remittent, that of intermittent, and that of enteric, fever; again, between that of enteric fever and that of typhus; between also, that of enteric fever, and that of scarlet fever, and between that of scarlet fever and that of diphtheria. Dr. Aitken has been ably advocating extension of careful observation upon these and such like relations. Those who believe in the germ theory as applicable to most infectious, contagious, and miasmatic diseases, and, at the same time, adhere to the creed of the evolutionist, see no reason for supposing that pathogenic micro-organisms form an exception to laws which are applicable, it would seem, throughout Nature. And, though sceptical concerning many of the explanations which have been advanced in this connection, we may yet allow that some amount of truth lies behind; and this despite the fact that the conversion of bacillis subtilis into bacillus anthracis in the laboratory has been abundantly refuted.

Some incline to a view taken long ago, a view expressed in the statement that, as results of overcrowding, typhus is begotten of man, glanders of the horse, and pip of poultry; and the observation of Sir Thomas Watson, concerning the conversion of a so called simple inflammation into a contagious inflammation, has been referred to as affording corroboration of such a view. In this sense evolution has been regarded as having had to do with the coming into being of some forms of infectious and contagious virus, and as affording explanation for certain intergradational reactions of such forms of virus upon the animal body. It deserves notice, however, in connection with arguments bearing upon this subject, and drawn from the so-called *de novo* origin of certain infectious diseases, that several micro-organisms, capable of producing infectious and contagious disease (for example, erysipelas and anthrax) can live and multiply outside the animal body, and yet produce their peculiar effects when reintroduced. And again, there is the question of degree of insusceptibility (that which is associated with age, that which is acquired and that which is inherited) which must be fully allowed for. It has been suggested that small-pox may have originated in a tropical lichen; but while our knowledge of disease in lower animals is as limited as it still is—and in the case of variola there is doubtless much yet to learn concerning it, for instance in the camel, in the goat, and possibly, too, in a wide range of animals; and variola may have existed in animals now extinct—we may well hesitate before accepting such speculation.

Dr. Aitken says: "Facts are in request which will illustrate the natural history of cases rather than mere opinions;" and in this remark he does but repeat what has very frequently been said of late years. In some, indeed in large degree response is, we think, being made to these appeals, for we read in the records of work (upon pathological subjects) now in progress, the attentive observation of men trained in each of the sciences, as well as of men deeply experienced in the science and art of medicine and surgery. The mystery of life is yet unsolved, but there is ample cause for taking a bright view of the biological revelations likely to be made even in the near future.—*British Medical Journal.*

THE DOCTOR AS PATIENT.

"The study of medicine and personal devotion to the alleviation of suffering do not insure the doctor against the ills common to all mankind; nor does an intimate acquaintance with the vagaries of the sick enable a physician to pass through his own trials with equanimity. In fact, the doctor is far from appearing at his best in the *rôle* of patient; he feels as much out of place on a sick bed as would a general officer if he were reduced to the ranks. He has been so long accustomed to command that he finds it very hard to obey, at least, without some sort of a protest.

"During his student days he was led astray by his imagination, which made him suffer from the ills of which he studied. He probably, at that time, convinced himself of the ease with which one exaggerates his own sensations, and learned to disregard his own feelings for the most part. Only

in such a way as this can we account for the neglect in himself of those beginnings of disease which a layman would suppose would infallibly arrest a doctor's attention, as they certainly would in a second person; as it is, he usually disregards his early symptoms and goes about with a temperature higher than that of the patient whom he sends inexorably to bed. He hopes for the best in his own case, as in others, but he fails to prepare for the worst, as he advises his patients to do, for he uses up, by continuing his work, the strength he ought to reserve to carry him through the sickness it needs no angel sent from heaven to foretell. Once fairly prostrate, it is usually the alarmed relatives who summon the doctor, rather than the patient himself.

"And it is no light task for the brother physician who presides over his sick bed to care for the prostrate individual, who insists on discussing the method of treatment, and, with a disordered imagination and weakened intellect, desires to sit in judgment on the conduct of his own case. The patient is apt to be skeptical as to the powers of the drug on which his friend and adviser relies. He suspects his friend of a want of candor in his bedside talk. The little talk outside his door, the ruses of his wife to gain a little private conversation with the doctor, excite his anger. He listens for the noise of the wheels after his friend has left the room, and, if the sound of his chariot is too longed delayed, he feels sure that the long-suffering man is delaying at the door to tell what he 'really thinks,' and he takes pains to interrupt the conversation by some abrupt message; perhaps, if it happens to be evening, by saying that it is time to close the house for the night.

"But if he is critical and somewhat skeptical, he learns to know his physicians by their steps, and even the roll of their carriages on the street; and no patient gives them a more cordial welcome, or parts with them more reluctantly. He feels sure that his memory of their kind attentions certainly must be longer than that of certain patients who, according to the familiar lines, whose truth is too often confirmed by experience, forget even the doctor's face when they have recovered.

"He seldom escapes making himself disagreeable to his nurses. It is hard to convince him that it is his own fault that his food does not taste as it ought. He is indignant that his own kitchen can not produce broth as good as that of his neighbor: but the tales of his own peevishness, when he hears them after recovery, he can but believe are grossly exaggerated.

"Nothing is more surprising to the doctor, when reduced to the position of patient, than to find that he himself is subject to like weaknesses as other members of the human family. The nervousness, for which, in others, he has had too little sympathy, shows itself in a thousand ways. The little noises impossible to avoid, disturb him, and the children of his household seem most unruly. Most strange of all, and most humiliating in his remembrance afterward, he even calls his doctor for nothing. He wakes from sleep, sure he is going to have a chill, or some equally unpleasant manifestation, and when, with grave face and careful attention, his hastily summoned physician has felt his pulse, taken his temperature, and sought for the signs of any possible complication, to inform him at the end that there is nothing to justify his fears, he admires and is grateful for the patience that has borne with his apprehensions, but he feels great curiosity to know what his doctor says to himself as he goes home to renew his broken sleep; and, most of all, he wonders at himself and mutters, 'Is thy servant a dog that he should have needlessly disturbed a doctor's sleep?'

"But especially trying to an invalid doctor is a tedious convalescence. His knowledge of the possible complications and sequelæ gives a wide field of possibilities, over which his imagination wanders uncontrolled, and he is fortunate if he does not become a hypochondriac. He is pretty apt to partake of the lay fondness for talking about the unusual features his case has shown. If he thinks about the matter at all, he finds how difficult it is to know at what length to detail his symptoms to inquiring friends. Unless he keeps his tongue in due subjection, he is apt to realize that few men are really good listeners, and his kind friends, when they are released from his story, may be excused if they say, 'Poor fellow, he needs bracing up.' But really there is some excuse for him if he is a little garrulous; personal experience of pain is different from looking on, but, interested as he is in his own closer acquaintance with disease, his account of it differs little, in the ears of his medical brethren, from the story they have often heard before.

"But a little personal experience of the sick-bed teaches the doctor many things. He certainly learns that a sick man does not look upon things as a well man does, and his charity towards an invalid's whims is greatly increased. He cannot fail, too, to be touched and softened by the many kind inquiries and pleasant messages that come to him. Busy men come and sit down beside him as though the dearest object of their hearts was to see him recover; men who justly plead bodily infirmity as an excuse against the slightest exertion climb his stairs to express their sympathy, and patients who have seemed thankless and forgetful show that they needed only the opportunity to show their gratitude. And, when the sick man resumes his place in life, he is pretty sure to have not merely an increased enjoyment in living, and a better idea of his fellow-men, but also a higher estimate of the value of his own profession."—*Boston Med. & Surg. Jour.*

THE MICROBES OF PNEUMONIA.—The subject of acute pneumonia is one of those which of late has excited a considerable amount of attention, and yet, common as the disease is, it is one which is surrounded by many unsolved problems. Professor Weichselbaum has recently contributed to the Vienna Medical Society, a paper, in which, after stating the prevelant opinions on the nature of the affection, and dwelling especially upon the different opinions held by Friedländer on the one hand and Fränkel on the other as to the precise characters and properties of the supposed bacterial agent, he relates his own experience. He points out that clinicians are divided into two camps upon the etiological question, some regarding pneumonia as solely an infective disorder, others considering that the infective forms are different from those caused by exposure to cold. Weichselbaum, distinguishing between primary and secondary forms, divides them into (1) lobar; (2) disseminated; (3) passive pneumonia—hypostatic, etc.; and (4) lobular. He has examined 127 cases and instituted 87 cultivation experiments, the material for the cultures being obtained one or two hours after death, as well as from the living subject, by means of a Pravaz syringe introduced into the lung and pleura. He distinguishes four kinds of microörganisms. The diplococcus pneumoniæ is the most common, consisting of oval, elliptical, and round cocci, which occur in chains as well as in pairs. The chains are composed of from six to eight or as many as twenty to thirty cocci, are straight or slightly curved, and the cocci are developed in a capsule of varying thickness in proportion to their vitality. The second variety resembles the first, but distinguished by a greater uniformity in spherical shape, and in forming long and sinuous chains. The third is known as the Staphylococcus aureus s. albus. The fourth he terms the bacillus pneumoniæ, consisting of rods of different lengths, the smallest and apparently youngest being oval. They have a capsule, and correspond to Friedländer's pneumococcus. The first variety was found in ninety-one cases, mostly of croupous pneumonia, also in the secondary forms. The second, or streptococcus, was found twenty times—namely, in fifteen cases of primary and five of secondary pneumonia. The staphylococcus occurred in secondary cases only, and mostly where the primary disease was due to this microörganism. The fourth kind was met with nine times, four times unmixed with other forms. All these organisms were most abuudant in the earlier stages of the disease, being scanty or absent in gray hepatization, and, if present, staining badly or unencapsuled. At the margins of pneumonic focus in the œdematous tissue micrococci were numerous, pointing to the œdema being not a passive process but a precursory stage of pneumonic infiltration, and resembling the invasion of cutaneous tissue in erysipelas. Moreover, inflammatory changes accompanied by these microörganisms were found in the respiratory tract above the lungs. Secondary meningitis in pneumonia was shown to be due to the presence of the same microörganisms, which were also found in the serous exudations of pleurisy and pericarditis, which might complicate the lung affection. The bacterial origin of the disease was, therefore, held to be demonstrated.—*Lancet.*

THE TREATMENT OF HÆMORRHOIDS.—The old division of hæmorrhoids into external and internal is useful, but is in many ways unsatisfactory. There are many varieties both of external and internal, and there is a distinct class which can scarcely be included in either, and which I have been in the habit of speaking of as intermediate.

Beginning with one form of the external trouble, the patient will give a history something like the following: He or she is in good health, and until a day or two past has never had any symptoms of rectal trouble. Quite suddenly, while about the usual occupations of the day, a sense of pain, just at the verge of the anus, is experienced, which steadily grows worse, until it becomes very troublesome. An examination is made by the sufferer, and a small, soft tumor is felt, which is very tender, and which disappears on pressure, but immediately reappears when the pressure is removed. It can be pushed within the sphincter, and the act gives relief, but it is down again in a moment.

After a few hours and some handling the patient is unable to sit with comfort; but the affair is so trivial that he does not care to go to bed, and so keeps around on his feet, and very likely applies Pond's Extract. After going to bed he feels better, and next morning imagines he is nearly well; but after an hour or two the pain is worse than ever, and the tumor is larger, harder, and more sensitive than on the day before.

If an examination now be made an external hæmorrhoid of one variety will be found.

The tumor will vary in size from a pea to a large grape, and is composed solely of blood clot. A small external hæmorrhoid vein has ruptured, and blood has been extravasated in the delicate subcutaneous connective tissues. The blood shows black under the tightly stretched skin, and the pain is due to the tension.

There are two ways of treating such a tumor. The first and best is to lay it freely open and turn out the clot from its bed. The bistoury should be sharp-pointed and delicate, the tumor should be transfixed from the anal surface outward, and the incision should be in the line of the radiating folds. After such an incision the pain will almost instantly disappear. A little styptic cotton should be placed between the cut surfaces, a large towel folded into a pad applied to the part,

and the patient told to sit upon a hard chair, with the compress under him, for fifteen minutes till there is no longer any oozing of blood. The subsequent treatment consists only in bathing with cold water two or three times a day, and the cut will be healed in three or four days.

This operation is so trivial and the relief so immediate that it is generally safe to perform it without any previous explanation to the sufferer; but should it not be permitted another plan must be followed. A carthartic containing podophyllin (pil. podophyllin co.) should be given at once, to secure two or three free actions of the bowels, the patient put upon his back on the bed or sofa, and a rubber ice-bag filled with finely powdered ice placed against the part, and kept there till the pain subsides. Cold usually gives great and immediate relief; but should it not, a poultice may be substituted. Under this plan of treatment the patient will probably be relieved in two or three days, so as to be able to get around with comfort, provided the clot is to be absorbed. In some cases, however, suppuration will occur, and in about a week from the time the swelling first appeared it will open spontaneously and discharge a few drops of pus, to the great relief of the patient. As soon as it becomes evident that this is to be the course of events, poultices should be applied and continued.

Those who have once been troubled with this form of hæmorrhoids are very liable to repeated attacks.—*Med. Rec.*

On the Uses of Papine.—Dr. W. J. Crittenden, of Unionville, Va., gives the following in the *Virginia Medical Monthly* for August, 1886:

In the practice of medicine we are often called upon to treat patients who possess a peculiar idiosyncracy as to the effects of opium or any of its preparations.

During January, 1886, I was called to see a lady suffering with acute peritonitis. She assured me that she could not use opium, as she had tired of it previously. But I gave her one-eighth grain of morphia sulphate and one one-hundred-and-twentieth grain of atropia sulphate hypodermically, and in a few minutes the depressing effects was noted, both upon the respiration and circulation; the pupils also became visibly contracted. I then tried the various usual substitutes for morphia in succession, but to no effect. I determined to try Papine; but not being able to give it by the mouth on account of nausea, and as she objected to the use of the hypodermic needle, I gave her two drachms per rectum, and repeated it in one hour. The result was that she sank into a quiet, peaceful sleep, which lasted for several hours. During the remainder of her sickness I gave her Papine, with the most gratifying results. As soon as her stomach would retain it, I gave it to her by the mouth in one drachm doses.

I have also used Papine in a case of uterine cancer, in lieu of morphia. In cases which patients have been taking morphia until it has lost its anodyne influence, Papine is well adapted.

Some time ago (in absence of the family physician) I was called to see a lady one night, in great haste, who was suffering with malignant disease of the uterus. On my arrival the nurse informed me that she had given her a grain of morphia, with suitable percentage of atropia, every hour for five or six hours, and during the intervals she had given her chloroform, but to no effect whatever. Accordingly, I gave her xxx min. of Papine with eighth grain morphia sulphate, repeating it in fifteen minutes, and in a short time she fell asleep and slept for six hours, which was more than she had slept at a time for months.

In pneumonitis, pleuritis, and bronchitis I have found Papine to answer an excellent purpose. In dysentery it is useful both as an anodyne and in relieving the tenesmus. In the diarrhœa of children I frequently combine with it bismuth subnitrate and prepared chalk. I have used it also in cystitis. In neuralgia, when I wish an anodyne, I use Papine. As an anodyne it is equal if not superior to morphia; and I have never yet seen any unpleasant effects from its use. As a hypnotic I find it to be an agent of great value.

It is inferior to bromida when we simply wish the effect of a hypnotic. But it fulfils the indications when we wish a decided anodyne as well as a hypnotic influence.

Beautifying the Skin.—The *Southern California Practitioner* tells us that in the work on diseases of the skin edited by Professor von Ziemssen, Dr. Heinreich Auspitz, of Vienna, makes the following observations upon this subject:

1. A healthy integument is not necessarily beautiful. Even if all requirements concerning diet, residence, atmospheric and climatic conditions, etc., are carried out, the complexion is often extremely bad. The general condition of health has no influence upon the beauty of the complexion, though it has upon the health of the skin. 2. Cleanliness is a *sine qua non* of the beauty of the complexion, though it does not play a great part in the health of the skin. 3. Water is serviceable to the skin in only moderate amounts and at moderate temperature. Very cold or warm baths, when used to excess, diminish the elasticity of the skin and its power of resistance to external irritants. 4. Distilled and so-called soft water are more suitable for washing, and less irritating than hard water. 5. The hard soda soaps are usually preferable to the soft potash soaps for toilet purposes. The quality of soaps depends upon the quality of their constituents and the thoroughness

of their saponification. Good soaps must not contain free alkali, or any foreign irritating substance. The addition of moderate quantities of perfumes does not materially change the quality. 6. Simple, finely ground powders, such as starch, magnesia, etc., are entirely innocuous, and often act as a useful protection against external irritants 7. Frequent application of alcohol abstracts the water of the skin, makes it dry and brittle, and impairs its nutrition. This is also true of glycerine. All toilet washes containing alcohol to any considerable extent should be avoided. 8. This is true to a still greater extent of other additions to washes, such as corrosive sublimate, mineral acids, certain metallic salts, etc. 9. Camphor acts merely as a bleaching powder. This is also true of benzoic resin, sulphur flowers, and substances containing tannic acid. 10. The use of sweet-smelling oils and fats should be employed to a greater extent than is now done for toilet purposes. 11. This is particularly true with regard to the growth of the hair. The nutrition of the scalp should be increased by the rational application of fat (for example in the form of oil baths by means of the application at night of a sponge soaked in oil upon the scalp), and the greater use of simple pomades. These should be applied to the roots of the hair rather than the shafts. 12. Substances should be avoided, or sparingly used, which abstract water from the skin and the roots of the hair.—*Med. & Surg. Rep.*

THE TREATMENT OF PLEUISY, DA COSTA.—1. *Acute Pleurisy*.—In the early stage, when effusion has not yet taken place, the question arises, Shall we employ local blood-letting? In a young, vigorous adult it is good practice to withdraw from f℥viij-xij of blood. Follow the cups by a poultice, on which place sufficient laudanum. This is a comfortable application. If we do not employ venesection, poultice at once and use counter-irritants. Subcutaneous injections of morphia in small doses near the inflamed pleura are of great value. It is of importance to keep the patient under the influences of an opiate. Dover's powder is a convenient form. Control the circulation by the use of tincture of aconite, in drop doses every hour, as indicated by the heart.

When effusion has taken place, do not cup; nor is aconite indicated, since the heart is displaced. At this stage, the acetate of potassium and digitalis are of great value, ℥ ss of the acetate to be given in liquor potassii citratis, in the twenty-four hours. Digitalis may be advantageously combined with the above. In a strong man, when the effusion persists, jaborandi is often of decided value. The iodide of potassium is a most useful agent when the effusion tends to linger. During its use, add small blisters, repeated occasionally. Often in these cases a gentle mercurial impression will start the effusion; then follow up with diuretics as well as diaphoretics. Sustain the strength, especially in lingering cases, by the use of stimulus.

When the effusion is overwhelming, the question of paracentesis comes before us. When delirium begins, and circulation and respiration become irregular, then it is time to tap. If the effusion be double-sided, then aspirate; but, as a rule, a double-sided pleurisy occurs in tubercular patients, so that tapping will not materially lengthen life.

2. *Chronic Pleurisy*.—This is both medical and surgical. In the medical treatment we have two remedies of great value, to wit: Basham's mixture, f℥ss, ter die, with strychnia, gr. $\frac{1}{80}$, ter die. Begin their use before pus has formed, for then only surgical means are of avail. The second remedy of utility is the iodide of potassium, to which add the use of small blisters. When irritative fever sets in, use quinia and digitalis. In weak persons, ol. morrhuæ is of great benefit. Chronic pleuritic effusion may sometimes be removed by half-drachm doses of fluid extract of jaborandi, given two or three times daily, just sufficient to keep up free action of the skin and kidneys.

When surgical treatment becomes necessary, some advise tapping always when fluid is present. Prof. Da Costa does not employ tapping as frequently as he did: the after results are not always favorable. Always select your cases for the operation.

The following directions are suggested for the operation of tapping: 1. Never tap until you have tried medical means. 2. Don't wait a day if pus be present. 3. In doubtful cases better tap, since medicine will not remove pus. Suppose your patient should take medicine for six months, and no result, when suddenly some fever develops: you may not fully believe that pus has formed in this case, but "tap, anyway." 4. Better tap more than once than leave a drainage tube in the cavity. 5. In large purulent effusions the tube may be used, but it produces fever.

Injections.—Prof. Da Costa prefers tincture of iodine; carbolic acid may be used, or corrosive sublimate in weak solution.—*Col. and Clin. Record.*

DOVER'S POWDER AND ITS MODIFICATIONS.—"If I could envy any one, as a therapeutist, it would be the old physician who originally had the happy thought of blending astringent opium with relaxant ipecacuanha, and both with a diuretic and laxative. I suspect that Dover's name, though so little is known of the man himself, is more frequently quoted than that of any other physician. This by the way; that which I have in my mind is to suggest that it is often very good practice to modify Dover's powder by combining the one grain of opium and the one grain of ipecacuanha with other salines than sulphate of potassa. The true Dover's powder contains nitrate of potassa as well

as sulphate, four grains of the nitrate to four of the sulphate, and it often seems to me reasonable to revert to this form, the nitrate of potassa being, in small doses, a good diuretic. I also very often venture to prescribe the powder with other modifications of the saline part, and with advantage. In acute rheumatic fever I usually substitute sodium salicylate for the potash salt; in gout, bicarbonate of soda; in remittent febrile cases, two grains of quinine with five of sodium salicylate; and in tonsillitis and other febrile throat affections, chlorate of potassa. It would surely be worth the time and skill of one of our scientific pharmaceutical brethren to prepare and bring out a series of Dover's powders in these modified forms.—*The Asclepiad.*

A Danger from Public Baths.—An interesting case is recorded by Dr. Aubert, in which blennorrhœa was communicated by means of a bath. A lady consulted him for her child, aged 4 years, who, for some days, had had an abundant vulvar secretion. The child also complained of pain and burning in passing urine. In relating the case the mother stated that she herself had, for some weeks, been affected with a like discharge, and her husband with a urethral discharge. According to the lady's husband, this was due to drinking turbid wine; an explanation which, as it was satisfactory to the lady, was not questioned by the medical man. A microscopic examination revealed the gonococcus in the discharge from both mother and daughter. On further inquiry it appeared that the child, three or four days before the appearance of its discharge, had taken a bath with its mother. No other possible source of infection could be thought of. In the same family there was another child which did not have the bath, and which escaped the infection. Professor Filippi, of Florence, commenting on this case (*Lo Sperimentale*, October, 1885), relates that, during the previous year, fifty-five little girls were infected with vulvitis at the public baths of Santa Lucia at Florence. Some of the children also contracted severe purulent inflammation of the eyes. The only explanation of this outbreak was, that the contagion had been deposited in the water by some woman or child already infected. Professor Filippi goes on to remark on the hygienic and medico-legal aspects of the case. It is not always possible to make sure that people making use of public baths are free from every sort of infectious disease. Unless, therefore, the supply of water be undergoing constant renewal, the water ought to be changed for each person. The forensic aspect of the case is also important. When a child, with vulvar discharge, is brought for examination on account of a supposed criminal assault, the above-mentioned mode of infection ought to be borne in mind.—*Brit. Med. Jour.*

Gangrene of the Penis.—Dr. Frank A. Coward, of Huddersfield, reports the following rare case to the *Provincial Medical Journal*:—On the 9th of January, 1886, J. L., æt. thirty-five, a weaver, married, consulted me for a swollen and œdematous condition of the penis. He had not suffered at any period of his life from gonorrhœa, syphilis, or stricture. Had always been healthy, though at times subject to fits of intemperance. Had worked up to the day of consulting me. I ordered him to bed at once. The next day, the 10th, the state of affairs were much the same, except that now a slight discoloration was visible on one side of the prepuce. On the morning of the 11th, the whole of the prepuce and a portion of the skin behind it was one mass of slough; so, with the assistance of Mr. John Martin, surgeon, I placed the man under chloroform, and slit up the mass, and then discovered that the glans penis was also involved, but no signs of a chancre, either hard or soft, were present, nor were any of the lymphatic glands enlarged. From the 11th to the 17th the gangrene spread slowly from the extremity to within an inch of the root, and a line of demarcation having now shown, I decided to remove the organ. On the afternoon of the 17th, again assisted by Mr. Martin, I amputated the penis by means of the thermocautery, about three-quarters of an inch from the root, and the man made a rapid recovery, and was able to return to work on the 5th of February. I have seen him lately; he is in good health, and shows no signs of secondaries, or other venereal complaint. There can be little doubt that gangrene was due to embolism of the dorsal artery.

Condiments for the Sick.—Dr. W. A. Hammond, (*Jour. of Reconstructives*), writes as follows: "It is rarely the case that sufficient attention is given to the use of condiments in the sick-room; they are often altogether excluded, or the patient is allowed to take them at his discretion, whereas much benefit will frequently be obtained by the judicious employment of these important agents. In certain low fevers of typhoid type, and in almost all malarial disorders, condiments may be largely used with advantage. Probably no one of them is more generally efficacious than black pepper. Mustard is also frequently relished, and we all know how grateful to us in our illnesses a little vinegar has been. In inflammatory affections of the stomach and bowels the stronger condiments, such as pepper, cayenne, mustard, and horseradish, are seldom admissible; but many cases of diarrhœa are very decidedly benefited, especially when they occur in persons who have somewhat run down in general health, by black pepper, cayenne, or mustard, taken in quantities far above those which a healthy person would be likely to ingest. I have frequently known severe cases of diarrhœa to be

cut short by a few doses of twenty or thirty grains each of cayenne, taken either in a little water or syrup. Black pepper is well known to be a remedy of no mean power in the common fever and ague of this country; it will often cut short attacks with as much promptitude as would large doses of quinine."

Belladonna in Sterility of Females.—There are few drugs which exhibit so pronounced a predilection to act upon certain structures of the body as belladonna. Among its favorite tissues, those of the female sexual organs may be mentioned. Its employment is followed by more or less benefit in every disease to which these parts are liable. I suppose it has fallen to the lot of almost every practitioner to be consulted by married women who never were pregnant, as to the cause of their barreness. Apparently they enjoy the best of health, and have never suffered from any irregularity of the sexual apparatus. To such I have on several occasions prescribed belladonna internally, and have found that after taking the medicine for some weeks, they become pregnant. I have seen this happen so often that I am constrained to regard the occurrence as something more than accidental. I shall not venture to theorize upon its action, but will merely mention that I have observed that the external genitals become more relaxed, and the os and cervix uteri somewhat softened and pliable, during the treatment.—*N. Y. Med. Jour.*

The Danger of Self-Medication.—Examples are plentiful of the risks which attend self-medication, even by medical men, who may be supposed cognisant of the potent nature of the remedies employed. The danger is singularly increased when the drug taken is of a narcotic or anæsthetic character, since by its use the faculty of self-preservation is placed in abeyance, and is unable to direct remedial measures when these have become necessary. A very sad case occurred during the past week, when the wife of a physician died in consequence of an over dose of ether, inhaled to relieve asthmatic attacks, to which the deceased lady was liable. The jury very judiciously added a rider to the effect that they were of opinion that so large a quantity of ether should not have been placed at her command. The lady was away from home at the time, and the reproach, therefore, was addressed to the persons who unadvisedly, if innocently, acceded to her request for a bottle of the drug. It would be some small consolation to think that this and other cases might serve as a lesson to people to use some discretion in employing toxic agents, but unfortunately past experience does not justify any such hope.—*Med. Press & Circular.*

An Item for Smokers.—It is stated on the authority of an American contemporary that the watercress destroys the toxic principle of tobacco without damaging its other qualities. It is said to be sufficient to moisten the tobacco with the juice of the watercress to deprive the tobacco of its deleterious effects. If this information may be relied upon, it will prove of especial service to beginners, and may help to spare them the pangs of physical remorse which not unfrequently attend the earlier efforts to acquire what is at best, an expensive and wasteful habit. It is open to question, however, whether if this end be obtained, smokers would not after all prefer the unsophisticated article; tobacco without nicotine is like certain teetotal beers without alcohol (some teetotal beers are, however, not exempt) which only satisfy when thirst is very urgent.—*Med. Press & Circular.*

Sleeplessness.—Dr. J. Milner Fothergill says of sleeplessness; "One broad rule to bear in mind is this: Opium is the agent where insomnia is due to pain; chloral, where it is due to a high blood pressure in the arterial system; the bromides where there is any peripheral irritation. Opium having a pronounced effect upon the sensory portion of the brain as an anaglesic, is the drug par excellence in sleeplessness due to pain. Whenever there is a morbid condition in tense tissues, as a syphilitic node, for instance, pain on going off to sleep is set up by that dilation of the blood vessels of the system generally which is essential to brain depletion. The effect of pain is to arouse the brain into wakefulness. Where such a complication exists it is well to combine the opiate with some potent depressant of the circulation, as antimony or aconite. In many cases a full dose of alcohol is sufficient for the attainment of the desired end."—*Brief.*

Boracic Acid in Cystitis.—In a thesis, on "Boracic Acid and its Therapeutics," by Senor Hermino Moreno for the degeee of M.B. in the Lima University, he gives the following formula, as the prescription generally given for chronic cystitis in the Surgical Hospital of Guadalupe, of which Dr. Moreno was intern.

℞	Infusi buchii, . .	120 grms.,
	Acidi boracici, . .	4 grms.,
	Acidi benzoici, . .	2 grms.,
	Syrup menthæ, . .	15 grms.

Ft. mist. A teaspoonful for a dose. This treatment is associated with washing out the bladder with water. The results are said to be most happy; the majority of such cases being cured in three days.—*La Chronica Medica.*

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EMANATIONS FROM DECAYING ANIMAL MATTER.

It cannot be disputed that the gases generated from putrid animal matter, in a concentrated form, are more or less inimical to health. But we are of opinion that the danger arising therefrom is greatly exaggerated. That the new organisms emanating from decaying vegetable matter, in certain seasons and climates, are very deleterious to those inhaling them, and active agents in causing disease and death, is well established. But that the organisms resulting from decaying animal matter, are equally noxious is by no means so clearly proved. Many scientific investigations *re* the poisonous effects of the gases and organisms, produced by the decomposition of the bodies of animals have been made. While most of the investigators admit that some deleterious effects may be caused from their inhalation for a length of time, when in a very concentrated form, the general tenor of the evidence adduced, goes to prove that these so called septic gases, are not so deleterious as is commonly believed. M. Parent Duchatelet, of Paris, in 1836, made a thorough investigation, regarding the health of those continuously employed in the manufacture of animal grease, glue, musical strings, Prussian blue, etc., and frequently visited all the tanneries, slaughter houses, especially Montfaucon, where the bodies of many thousands of horses, dogs, cats, and other domestic animals, are annually worked up for various economic purposes. He says that 'nothing could exceed the filthiness of *chantier d'equarrisage*. The enclosures, and the air of the country for some extent around, are saturated with the most disgusting odors." Yet he found that the employés in all these establishments enjoyed as good health as the same class of laborers in any other occupations. M. Rousseau, of Paris, superintended the dissection of the bodies of animals for thirty-six years; yet he says that neither he nor any of his assistants ever suffered from their occupation, even during the summer.

M. Lallemand says the dissecting rooms established by Dessault, are situated in the top storey of an old decayed house, in a crowded part of the city. The average number of bodies on the tables was from fifty to sixty, and the number of pupils two hundred or more. The rooms were seldom cleaned, and the stench diffused over the immediate neighborhood was abominable. Yet, he says, "we never heard of any disease, which might fairly be attributed to the dissecting rooms, either among the pupils themselves, or the inhabitants of the adjacent houses." Dubois, Dupuytren, Boyer, Andral, Lawrence, Warren, and many other teachers of anatomy all concur in the opinion that 'it is an error to suppose, that the air of a neighborhood is ever contaminated, so as to induce disease, by emanations from dissecting rooms, or that the students ever suffer from breathing the impure air of those places. Did space permit, we might multiply eminent authorities who endorse this view. But to come down to our own experience; we are all aware that many students, in all medical schools continuously inhale while at college, the gases from the dissecting rooms, which must permeate the whole building, and the health of medical students will compare favorably with that of any other class of men or students similarly situated, minus the dissecting rooms. In the many slaughter houses of all our towns and cities, the butchers employed are proverbially healthy, although large quantities of blood, and other parts of the animals, must be continually in a process of decay therein, and the emanations more or less frequently inhaled by them, at all seasons of the year. The mortality of Chicago, Cincinnati, and other centres, where slaughtering of animals for export is largely carried on, does not appear to have been augmented from this cause.

We are fully aware that instances of disease in

armies, said to be caused by the putrefaction of the bodies of men and horses, are recorded. Yet modern history does not appear to bear out this idea. We therefore may be permitted to doubt the alleged cause, especially as physicians of remote times, were not sufficiently advanced, nor had they the means to properly differentiate the various causes of disease, as those of a later period, or the present day have. They would therefore, be more likely to attribute the cause to what so offensively impressed their Schneiderian membranes. Decaying vegetable matter, pools of stagnant water, emanations from the bodies of the living, contagion germs, sewer gas, etc., are admittedly much more potent factors, although not recognised when "coming between the wind and our nobility," than any thing which offends our sense of smell. Therefore the offensiveness of an odor is no test of its unsalubrity. Otherwise the so called health resorts, where certain springs keep the surrounding air charged with sulphuretted dydrogen, and other offensive gases, would become centres of disease, and shunned by all. It has also been said, that persons have been made ill or suffocated by going into vaults where the bodies of the dead had lain for some time, but this is no evidence that the septic gases therein, emanated from the bodies, as many persons have experienced the same effeets, from descending into old wells, mines, caverns, and other cavities in the earth, in which there were no bodies of the dead. Recent experiments in a dead-house in New York, have proved that the air of the autopsy and other rooms, contained fewer septic microcosms, than the most favored (Osborne) ward of Bellevue Hospital, which is a one storyed brick pavilion, and is considered a model of sanitary construction and arrangement. Many other instances corroborative of the comparative innocuousness of decaying animal matter, might easily be adduced, but space forbids Enough has been said to establish all we claim. Nor do we for a moment deny the necessity for the interment or destruction of all animal bodies, before putrescence has supervened, not only for the abatement of a nusiance, but in the interest of the public health, save only, when science or art demand these bodies in the interest of, and for the welfare of the living. We write only to remove improper conceptions and fallacies, which have been inculcated by our early teaching, and have been long established. While we admit and believe that there is some danger to the living from the decomposition of the bodies of the dead, no relaxation of our efforts to obviate any risk from a contaminated atmosphere should be permitted. But where science or art requires those bodies for any purpose, it is important that all should entertain correct opinions; that useless anxiety and alarm should be removed, and unnecessary opposition, whether arising from public prejudice or authoritative mis-information, thereby obviated.

COLD BATHING.

The value of cold bathing is variously estimated by different members of the profession and the laity. Some physicians believe in its usefulness as an ordinary part of the day's programme, and accordingly, recommend it almost indiscriminately, talking learnedly all the while, about "toning up the system," reaction, etc.; while others go so far as to condemn it unreservedly as a matter of toilet, thinking it a waste of energy. The feeling of the latter is well expressed by the following sentence which we heard from the lips of an old member of the profession, one whose acumen was remarkable, "Are you one of those idiots who goes slashing himself over with cold water every morning?" We read of such men as old Haddon who bathed in the Thames, every morning for the last fifty of his 92 years, ice or no ice. Such cases prove nothing but that a *lusus naturæ* more has been discovered. The truth about the matter probably is, that this, like every other means of promoting health and vigor, must be used judiciously and not as a routine in all cases. This sounds like a platitude, in speaking to the profession, but the laity require education on this point. How many intelligent men injure themselves daily, by the too plentiful use of cold water, under the idea that they are toning themselves up. True they may feel a reaction for a short time after leaving the bath, but this is followed by a depression in a few hours during which nutrition and tissue change are decreased. Such of our population as wear themselves out by the fatigues of business, late hours, dissipation, etc., who waken unrefreshed and miserable, find the stimulus of a cold bath most agreeable, but this stimulus is most objectionable, and it is objectionable for the same reason that an

alcoholic stimulant would be objectionable, viz.: that it enables the individual to draw on his reserve force, and so get through his duties for a few hours, but does not supply any force, or anything which can be changed into force.

Again, many delicate and unsound persons use the cold bath freely, sometimes under medical advice and sometimes not, but in nearly every case to their detriment. Such persons should never use the cold bath, except under careful medical supervision.

The first effects of immersion in cold water are depressant, the surface becomes cold, owing to the contraction of the cutaneous vessels; shrivelled and pale, there is general shivering, quickened pulse and respiration. Now if in a few seconds the system rouses itself and meets the shock, if the skin turn red and glowing, the pulse strong and slow, and the bather feel exhilarated, with a sense of physical and mental well-being, the cold bath may be employed as a tonic. But always on condition that it shall be discontinued before depression again sets in, for otherwise this sense of depression deepens, the lips and extremities turn blue, and the individual feels utterly wretched, which condition may persist for hours or days and the effect of the bath may thus be entirely bad. The reaction so necessary for the good effects of a cold bath, may be aided by friction with a flesh brush or cash towel, or also by a short brisk walk. Old persons, not having much power to resist depressants should use the cold bath with the greatest caution, as should persons, who, though apparently robust, have some organic disease. Some authorities go so far as to credit excessive cold bathing with being the cause of latent albuminaria. The popular idea of *hardening* by exposure, has been shown by Rosenthal, to rest on a scientific basis. Cold baths by training the cutaneous vessels to contract, lessen the loss of heat when the body is suddenly exposed to cold, and thus persons who have in this manner "hardened" themselves are not only less liable to "catch cold;" but are also able to endure greater degrees of cold than are those who have not so trained their cutaneous vessels. Again, the stimulation to the circulation which comes on as an after effect, tends to increase the histological metamorphosis of the tissues, as well as to hasten the excretion of the waste products in the body, and thus the bath truly acts as a tonic of the highest order, both to the nervous and muscular systems. The respiratory system is also reflexly stimulated by the action of cold on the surface, as is evidenced by the sobbing, convulsive breathing, noticed when the water reaches the breast. Ringer recommends cold sponging as exceedingly useful in laryngismus stridulus, and says that a paroxysm may often be arrested by dashing cold water over the child.

The time of taking a cold bath is a matter of some importance; before breakfast being the usual time. This can be well borne only by the most robust, the best hour being about midway between breakfast and dinner, when the system is fully braced to throw off the depressant effect of the cold water, and to rouse to that reaction which has been insisted upon as a *sine qua non*, if the bath be not absolutely harmful.

Another popular idea, that the water should not he entered while the surface is warm, needs to be exploded. The surface and extremities should be *warm* when a cold bath is taken, and exercise should be taken just previously, if necessary, to effect this purpose.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.

The fourteenth annual meeting of the American Public Health Association was held in Shaftesbury Hall, Toronto, on the 5th, 6th, 7th and 8th of October, under the presidency of Dr. Henry P. Wolcot, of Cambridge, Mass. A large number of gentlemen both lay and professional were present, and the proceedings were characterized by more than usual interest. A number of new members were elected on the first day, and the report of the treasurer read, showing a goodly balance in favor of the Association. Dr. Reeves, of Wheeling, Va., read an excellent paper on the "Destruction of night-soil and garbage by fire." Dr. Playter, of Ottawa, read a paper on the disposal of sewage. "Toronto sewers," by Alan Macdougall, followed, and a paper by Dr. Oldright, of Toronto, on "The influence of sewerage on health," with special reference to Toronto. This last was discussed by Mayor Howland, Drs. Covernton, Canniff, Cassidy and others.

In the evening a conversazione was held in the Normal School buildings, Dr. Wilson in the chair.

Dr. Covernton gave a short address, in which, after welcoming the visiting brethren, he explained the position of the Provincial Board of Health, and spoke of the willingness shown by the Government to aid them in their labors. The address of the President was next in order, and it was received with applause. He spoke of the importance attached to scientific investigations, and urged that the Government should begin the work of investigation in the case of diseases which affect the people as a whole. He concluded by drawing attention to the great work which had been done by intelligent health authorities, and believed that still more might be accomplished if their functions were performed in a more fearless manner than had hitherto been the case.

On the morning of the 6th, the President being in the chair, a number of new members were elected. After other routine business, Dr. Covernton read a very interesting paper on "The relation between Sanitary Science and the Medical Profession," by Dr. N. Allen, of Lowell, Mass. It was well received. Dr. Hewitt read the report of the Committee on State Boards of Health, including the subject of "Inter-State notification on the outbreak of small-pox, cholera, and yellow fever."

In the evening Dr. Bell, of New York, presented the report of the Committee on the disinfection of rags. After an interesting discussion, in which a number of members took part, the resolution was adopted.

The following days were occupied with papers on various subjects of interest, by Drs. Bryce, Covernton, Baird and others, and in the election of officers, as follows: President, Dr. Sternberg, Major U.S.A., Baltimore; 1st Vice-President, Dr. C. N. Hewitt, Secretary Minnesota State Board of Health; 2nd Vice-President, Dr. C. A. Lindsley, Secretary State Board of Kentucky; Treasurer, Dr. J. B. Lindsley, Nashville, Tenn.; Secretary, Dr. Irving A. Watson, Concord, N.H. Executive Committee, Dr. Hy. B. Baker, Lansing, Mich.; Prof. H. A. Johnson, Chicago; Dr. Holt, New Orleans; Dr. Rohe, Baltimore; Col. Haddon, Nashville, Tenn., and Dr. Montizambert, Quebec.

THE PROPHYLAXIS OF PUERPERAL ECLAMPSIA.—Supposing that during pregnancy we find albumen present, we should give purgatives and keep the patient at rest and on a milk diet, says Dr. Jno. W. Byers in the *Dublin Jour. Med. Science.* Both Tarnier and Chantreuil recommend this form of milk diet. All nitrogenous food should be avoided, and a course of iron should be prescribed; if, however, the regular examination of the urine shows that the amount of albumen is large and *steadily* increasing, if there are casts and œdema of the face and upper extremities, and if, in addition, any cerebral symptoms appear, then undoubtedly labor should be induced without delay. Further, if towards the end of gestation the urine become diminished in amount, if there is a good deal of albumen, and if to these symptoms be added the presence of headache, we should at once administer chloral and keep a most careful watch on our patient, so as to be ready to induce labor if convulsions set in. We do not understand why we should give chloral, but we suppose Dr. B. knows what he is talking about. If we had a patient in this condition, we would resort to jaborandi for the drug treatment.

ANTIPYRINE.—The employment of antipyrine in a large number of cases, reported by Pavay in a foreign exchange, leads to the following conclusions: when the temperature reaches 105° and above, as many as 60 grains should be given in four doses administered half an hour apart. This quantity will seldom fail to reduce the temperature very materially, and cause it to remain lowered from six to sixteen hours. Provided the temperature does not exceed 103°, 31 grains divided into three powders and given half an hour apart will suffice to reduce the temperature. In a temperature of 104°, three doses may be given, as in the previous case, of 15½ grains each. If in any case the stomach can not be made to retain the medicine, it may be given by enemata in quantities of from thirty to forty-five grains at a dose. It may also be given hypodermically in a five per cent. solution. Whatever manner it shall be given in, if given correctly in sufficient doses, as indicated by Pavay, the temperature will be reduced and held in check.

TREATMENT OF CHANCROIDS.—Prof. Gross treats chancroids (*Col. & Clin. Rep.*) as follows, if seen a few days after their appearance: Wipe out the sore and under the edges thoroughly with cotton, then apply with another bit of cotton carbolic

acid, being careful to touch all the raw surface and to get well under the undermined edges. The pain caused by the application is but momentary, and is followed by a sensation of numbness, which prevents pain from further manipulations. Now, with a bit of cotton wrapped on a match, touch the ulcer with strong nitric acid. This will destroy whatever poison there may be left. Protect with a bit of cotton. Have the patient bathe the penis in warm alkaline water three or four times per diem. If the prepuce covers the sore, let him use a wash :

R	Cupri sulphat., ...	gr. $\frac{1}{8}$
	Acid. tannic., ...	gr. ij
	Aquæ	f ℥j M

Place a piece of cotton cloth between the glans and prepuce. A bubo can be aborted by injecting into it an eight per cent. solution of carbolic acid, and the use of compression. If already formed, it may be treated as the original sore.

Manitoba Medical Elections.—The first election of members of the Medical Council of Manitoba, under the Act passed last session, took place on the 30th of September. The following territorial representatives from different parts of the Province, were elected : Drs. J. S. Lynch, S. C. Corbett, J. S. Gray, W. J. Roche, F. B. Lundy, M. Macklin, J. A. McDonald, R. L. Thornton, H. A. Husband, D. Young, and D. H. Cameron. College Representatives: Manitoba Medical College, Drs. R. B. Ferguson, R. J. Blanchard, J. Patterson. The first meeting of the Council was held in Winnipeg on the 13th ult., when the following officers were elected for the ensuing year : President, Dr. J. S. Lynch ; Vice-President, Dr. J. A. McDonald ; Registrar, Dr. J. S. Gray ; Treasurer, Dr. S. C. Corbett. The following gentlemen were appointed to represent the Council on the Senate of Manitoba University : Drs. M. Macklin, H. A. Husband, J. S. Lynch, S. C. Corbett, R. J. Blanchard, R. B. Ferguson, J. Patterson. Under the Act powers are granted to the Manitoba University to hold all examinations thus materially lessening the expense to the medical student. The Act also provides for reciprocity in medical registration with other Provinces having similar boards.

New (?) Principle in Treatment of Parasitic Skin Diseases.—Dr. Perry, of San Francisco, writes to *The Med. Rec.* that the cause of failure in the treatment of skin diseases is not due to the powerlessness of the parasiticide, but to the fact that the agent does not reach the parasite. He remarks that the bichloride and iodine are soluble in ether, and that turpentine and benzine dissolve iodine. He prefers the use of the bichloride in ether gr. ii, ad. fl. ℥i. for the reason that it always remains active, while the iodine oxidizes in both turpentine and benzine. The principle is that the ether or benzine penetrates the skin, and reaches into the follicles, thus bringing the parasiticide into contact with the parasite.

The Chlorodyne Habit.—This is another of the many habits which have such a hold upon humanity. The *Br. Med. Jour.* mentions three cases of the habit. The body of a lady aged sixty-two was examined and it was found to be greatly emaciated, not weighing more than fifty pounds, owing to the continued use of chlorodyne, which it was shown, she as well as two sisters who resided with her had been taking for years. The jury returned a verdict of death from continued doses of chlorodyne.

Bromide of Arsenic in Diabetes.—Moock (*France Med.*, Feb. 25, 1886 ; *Glasgow Med. Jour.* July, 1886) reports the case of a woman fifty-four years old, who had probably had diabetes about four years, and who also had phthisis in the stage of cavity. She was much troubled with itching of the vulva. Small doses of bromide of arsenic were given, together with iodoform, and in two weeks the pruritis had entirely disappeared and the chest symptoms were much ameliorated. At first she was given gluten bread, but afterwards she was allowed ordinary bread toasted. The improvement continued steadily for two months, at the end of which time the amount of sugar passed in the urine had been reduced to not much more than one-twentieth of the original quantity, and the chest symptoms were quite checked, although a cavity, of course, remained.

Tongaline.—This new remedy for Neuralgia and Rheumatism has been used extensively by the physicians throughout the United States, and has been found to control those obstinate troubles more speedily and more thoroughly than any other agent, without causing any unpleasant results. Messrs.

Evans, Sons & Mason, of Montreal, will furnish samples gratis, to all those who apply for the same and are willing to pay express charges on the package. We believe the remedy is worthy of a trial.

Appointments.—Dr. J. C. Cameron, late Prof. of Obstetrics in Bishop's Medical College, has been appointed Prof. of Obstetrics in McGill College, Montreal. We congratulate the Dr. on this important appointment. The fact that he went abroad last summer to study the most modern ideas and improvements in this department, is an indication of the zeal and interest which he will bring to bear in the discharge of his duties.

Dr. N. E. McKay, of Halifax, N.S., has been appointed a member of the Provincial Medical Board.

Dr. W. S. Oliver, of Halifax, has been appointed consulting physician to the City Hospital.

A Remarkable Case of Superfœtation.—Five months ago the wife of James Lewis, of Halifax, N.S., was delivered of a fully developed male child, and a few days ago she is reported to have given birth to another healthy infant of the same sex. Both children and their mother are reported in good health. We have written to Dr. Somers, who attended the woman on both occasions, for an authentic report of the case.

Owner Wanted.—We received on the 13th ult. a registered letter from Montreal containing $6, but without any signature. We also received $3, a few months ago without letter or signature from a messenger of the Rossin House, Toronto, but he could not give the name of the party who handed him the money.

Functions of the Prostate Gland.—Professor Fürbringer from the study of a case of spermatorrhœa, concludes *(Med. Rec.)* that the function of the prostate "is to exert a specific vivifying influence upon the spermatazoa which while in the seminal ducts and vesicles possess but slight vitality, and quickly die when removed from the body unless subjected to the stimulating influence of the prostatic fluid."

Amendments to the Quebec Medical Act.—At last there is some prospect of the establishment of a central examining board for Quebec. The proposed board will consist of twenty members—ten English and ten French. A clause is also to be introduced providing for reciprocity in registration with Great Britain, Ontario, and any other Province in Canada which shall establish a central examining board.

Mixture for Diarrhœa:

℞	Tr. opii camph.	℥ i
	Mistura cretæ	℥ iii
M.	Oil Menthæ pip.	♏. x

Sig.—A teaspoonful for an adult every three hours until diarrhœa is checked.

For infants the following prescription will be more appropriate, and more easily retained on the stomach:

℞	Vin. Pepsini	℥ ii
	Bismuth. subnitratis . . .	ʒ iii
	Glycerini	℥ i
M.	Aqua q. s.	ʒ iv

Sig.—Give ʒ i. at a dose every two or three hours.

Bacillus of Dysentery.—Two Italian physicians (in the *Rivista Internazionale di Medicina e Chirurgia*, No. 12) allege that they have discovered that dysentery is caused by the presence of a bacillus not yet described. This parasite they have invariably detected in the fæces of dead patients who have succumbed to dysentery, in the air of hospital wards where the patients were congregated, and in the water of two wells which had been exclusively used for these patients.

Abortive Treatment of Mammary Abscess.—In referring to the treatment of mammary abscess, Dr. Chase, Millwood, Kansas, writes to the *N. Y. Med. Rec.* that he uses extract of belladonna. The solid extract rubbed up with enough simple cerate to make the mass soft, or fluid extract of belladonna ʒii, tincture of iodine ʒi, painted on the part. He concludes thus: "I never fail in arresting suppurative tumors when application is made any time before the formation of pus."

Female Medical Students in India.—The Medical College of Madras has fourteen female students, four of whom are native Indians. The movement was inaugurated by Lady Dufferin, who has done so much for the improvement of the condition of the native women.

SALIVATION OF PREGNANCY.—Dr. Schram finds (*Br. Med. Jour.*) that Bromide of Potassium is the most effective drug for the excessive flow of saliva, sometimes occurring during pregnancy. He states that it is harmless, and yet exercises a distinct effect on the salivary nerves. From a chemical examination of the saliva, ptyalin was found to be absent.

PAINLESS LIGATION OF HEMORRHOIDS.—Dr. Stallord of Manchester, writes to the *Br. Med. Jour.*, that he has ligated piles after the injection of ten drops of a 10% solution of cocaine, without causing the patient the least pain. As the effects of the drug are transient, it requires to be followed by morphia. No toxic effects were noticed in any case.

A medical man who makes liberal use of printer's ink remarked to us a short time ago: "You may say what you like about your medical ethics, but it pays to advertise."

M. SELLAR states (*Br. Med. Jour.*) that he finds great improvement in patients suffering from tuberculosis, who are treated by inhalations of hydrofluoric acid.

WINNIPESAUKEE means (*Med. Summary*) "The smile of the Great Spirit." It will save winking in the drug store, therefore, to simply ask for a "Winnipesaukee."

REMOVAL.—Dr. G. S. Ryerson, oculist and aurist, has removed from Church Street, to 60 College Avenue, Toronto.

The distinguished Birmingham surgeon, Mr. Sampson Gamgee, is dead.

Books and Pamphlets.

ELECTROLYSIS, ITS THEORETICAL CONSIDERATION AND ITS THERAPEUTICAL AND SURGICAL APPLICATIONS. By Robert Amory, A.M., M.D., Member of the Massachusetts Medical Society, Fellow of the American Academy of Arts and Sciences, Fellow of the Academy of Medicine, etc. Illustrated by one hundred fine wood engravings. "Wood's Library of Standard Medical Authors," for 1886.

We cannot withhold our thanks to the publishers for their considerate supply, in type, of the above heading. A great poet has told us that "nothing in writing is so hard as a beginning." The writer of notices of new books, and especially of those on medicine, cannot fail to corroborate this testimony At the very start, he is, in the majority of instances, confronted with a string of authorial titles, which very severely test his mental placidity, and perhaps too often induce a sourness of temper which is rather inconsistent with just criticism. "Good ale requires no broom," is a very old and a very true maxim. We seldom light upon a book from the pen of any really able and judicious author, that bespeaks our admiration, with a long tail flourish of collegiate honors and dazzling memberships. But publishers best understand their own business, therefore we simply tender our expression of sympathy with Dr. Amory under the severe trial of his modesty, which he must have suffered in glancing over the title page of his book, an infliction to which, we feel almost certain, he will not be subjected in the event of a second edition being called for; and we must confess that the merits of his work well entitle it to a very large circulation.

Electrolysis, in the armamentaria of therapeutics is destined to play a high and effective role in medicine and surgery. Even as yet in its infancy it has achieved numerous signal triumphs, with which no earnest and benevolent practitioner of the healing art should be unacquainted. An attentive perusal of Dr. Amory's book will amply confirm this commendation. In a general summary, at the conclusion of the volume, the author names the following affections, in which it has proved either positively curative or acceptably ameliorative, viz.: Aneurisms, Effusions, Hydroceles, Hæmatoceles and Varicoceles, Orchitis, Hypertrophy or Elephantiasis, Nævi, Varicose Ulcers, Eczema, Warty Growths, Wens, Fistulas and Sinuses, Goitre, Hypertrichosis, Urethral Strictures, Cystic Tumors, Extra-Uterine Fœtation.

Practitioners to whose lot it has fallen to contend with any rebellious cases of the above named affections, will assuredly feel very grateful for impartment to them of any instruction which may enable them to arrive at better results than heretofore; and as the method of employing electrolysis, preferentially advised by Dr. Amory, is almost totally exempt from pain, their patients will not be averse to the experiment.

Among the number of bodily ailments mentioned

by Dr. Amory, in which electrolysis has been employed, there is one, which is perhaps less unfrequent than the revealed secrets of evening office consultations might show. Speaking plainly, we allude to obstinate, tight urethral strictures. Dr. Amory's run of practice among this class of clouded moonlighters has probably been but limited, otherwise he might have shed valuable light on the efficiency of electrolysis in this delicate department. Dr. Neuman, of New York, has reported a large number of strictural martyrdoms successfully treated by him, by means of electrolysis; and it is quite probable that a decent proportion of other more reticent members of the profession, who "do good, but blush to find it fame," might give corroborative evidence. We by no means desire to wound the delicacy of our own townsman, Dr. Cassidy, when we state that he has successfully treated by electrolysis, at least two cases of rebellious urethral stricture. We would fondly trust that the faculty of our city could augment this number; or if not, that its reading members will soon be able to do so; and in order to reach so desirable a consummation, no better course can be taken than to purchase Dr. Amory's instructive book, and read it patiently, excusing some American bad grammar.

A System of Practical Medicine, by American Authors, edited by Wm. Pepper, M.D., LL.D., Provost and Professor of Theory and Practice of Medicine, and Clinical Medicine in the University of Pennsylvania; assisted by Louis Starr, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Vol. V.—Diseases of the Nervous System. Philadelphia: Lea Brothers & Co., 1886.

We have received the 5th and last volume of this most excellent work by American authors and are greatly pleased with it. It is devoted to the consideration of the various diseases of the nervous system, and is a most exhaustive treatise on the subject. The entire work is now before the profession, and those who are its possessors have before them an elaborate, exhaustive, and practical treatise on medicine. The total number of articles is 185, written by 99 authors and covering about 5500 pages. We heartily commend the work to our readers.

Physical Culture: First Book of Exercises in Drill, Calisthenics and Gymastics, for the use of Schools and Colleges. By E. B. Houghton. Toronto: Warwick & Sons.

This book is one of the Canadian series authorized by the Minister of Education of Ontario. Its aim is to bring the mental powers into action with the physical and thereby improve both. While the author has endeavored to preserve the general physiological basis he has varied the exercises so that different sets of muscles are brought into play successively, requiring sharpness of intellect to follow them up, especially when performed in concert. The "Drill" is an adaptation of the "Field Exercise," and requires no change in case the pupil afterwards enters the Volunteer Corps. The work is well illustrated, the explanations clear and concise and the methods well adapted to fulfil the object aimed at. The part devoted to girls is worthy of the highest commendation.

The Medical News Visiting List for 1887, with Erasable Tablet and Thumb-letter Index. Price $1.50. Philadelphia: Lea Bros. & Co.,

The above mentioned list is published in four styles; *dated* for 30 patients per week (1 vol), for 60 patients (2 vols.), for 90 patients (3 vols.) and *undated* (1 vol). The work contains brief memoranda on examination of urine, disinfectants, poisons, new remedies, doses, therapeutic tables, etc. In short it meets every requirement of the profession, and cannot fail to give satisfaction.

Births, Marriages and Deaths.

On the 29th Sept., Geo. R. Cruickshank, B.A., M.D., C.M., of Ellesmere, to Emma J., daughter of John Downie, Esq., Chatham, Ont.

On the 23rd Sept. Robt. Wilson, M.D., of Morden, Man., to Bella, only daughter of Robt. Wallace, Esq., Fallowfield, Ont.

On Oct. 13th ult., Dr. Storms, of Hamilton, to Miss Kate Hinch, daughter of Mr. Thomas Hinch, of Napanee.

At St. Louis, Mo., on Oct. 20th ult., Dr. A. Woolverton, of Hamilton, to Miss Colcord, of Hamilton.

On the 21st of September, Dr. McDonald, son of Dr. McDonald, of South Cove, N.S., in the 26th year of his age.

On the 24th of September, J. Steverman, M.D., of Lunenburgh, N.S., aged 77 years.

*** *The charge for Notices of Births, Deaths and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

REPORT ON OBSTETRICS.*

BY H. M. MACKAY, M.D., WOODSTOCK.

Obstetrics has, during the past year, engaged its full quota of enthusiastic and active workers. And while there has been no specially marked departure by way of new discovery, a great deal of earnest and thorough work, in investigating and discussing the old landmarks, has taken place.

The subjects receiving the greatest prominence were the various operations in the abdominal cavity, for diseased ovaries, Fallopian tubes, pelvic abscess, extra-uterine pregnancy, Cæsarean section, hysterectomy, and Alexander's operation. Albuminuria of pregnancy, placenta previa, and puerperal fever have also claimed their share of attention.

To open the abdominal cavity is now considered so trivial and easy an operation, that the surgeon who is not able to report a series of such cases in his practice, is in danger of being rated as very commonplace. The particular organ upon which the greatest amount of tender solicitude has been expended, of late, is the ovary, which is either an oft-offending or a much-maligned member of the female anatomy, and occupies at present a somewhat precarious place. With the tendency to so frequently, associate the ovaries as a chief factoral cause in so many female diseases, there is, undoubtedly, danger that they may, at times, be unwarrantably sacrificed; and it is scarcely to be wondered at if we now and again meet with protests against a too great readiness, verging on recklessness in "performing capital operations on the possibility of relieving diseases not necessarily fatal in themselves." And it is quite possible that, occasionally, cases supposed to have been improved by the removal of an ovary or ovaries, have derived from the operation but the benefit of reflex sympathy, that might have been equally marked had a finger or an ear been removed instead. Nevertheless, there is no doubt but öophorectomy is now established, as an important and successful advance, in obstetric surgery; and though not originating during the past year, it has been on trial, and its claims vindicated as the best, and indeed the only, recourse in many cases where other treatment holds out not even a ray of hope to the patient. The same remarks apply to the removal of the Fallopian tubes.

Ovariotomy, as an operation, has reached such perfection, as scarcely to admit of further improvement.

Cæsarean Section, until recently regarded as a desperate alternative, is now, in view of the confidence with which laparotomy is undertaken, considered an ordinary operation, and recommended to take the place of craniotomy. This is approved of by many authorities. In Crede's clinic, three women are reported as having been subjected to that ordeal, when the indication was merely relative, and delivery would have been easy with craniotomy.

Extra-uterine pregnancy has come in for a good share of attention, and the following opinions have been emphasized: That the disease is not so rare, nor necessarily so fatal, as is generally supposed; that the diagnosis is at times most difficult, as shown by failure at the hands of the some of the most experienced diagnosticians; that early diagnosis is most important. In differential diagnosis the most reliable signs are the absence of the placental souffle and uterine contractions—both well-marked symptoms in uterine gestation. The treatment most in favor is to destroy the fœtus early, by electricity or puncture, and then leave the case to nature, long enough for placental vessels to atrophy, before resorting to further operative procedure, when laparotomy is recommended.

Alexander's operation, for misplacements of the uterus, has been tested and its merits discussed at the obstetric and gynecological societies. From these the inference is that the operation has not yet met with a favorable reception.

Albuminuria of pregnancy: The consensus of

*Read before the Can. Medical Association, Aug., 1886.

opinion seems to be that the parturient suffering from albuminuria should be under vigilant observation during the later months of gestation, and the urine frequently examined quantitatively and qualitatively, and in case alarming symptoms should develope, to bring on labor. Should eclampsia supervene, pilocarpine, chloroform, potassae bromide, chloral hydrate, and morphia are the remedies most in favor.

Placenta previa has not yet reached a definite and finally accepted line of treatment, applicable in all cases, and probably never will. The following may be taken as a safe general guide:—Patients living in the country and beyond the reach of immediate attendance, should, on the first alarm of the nature of the case, be either prematurely delivered, or left in the charge of an intelligent nurse, who could plug the vagina, awaiting the arrival of a physician; or, the patient should be moved into town, to be within easy reach, when nature might be trusted a little longer with the conduct of the case. Should hemorrhage become alarming, a choice of three methods is recommended, in each of which prompt action is indicated: First, plug vagina, and await the advent of labor and dilatation of the os. Second, rupture membranes, that the hard presenting part of child may arrest the hemorrhage. Third, to sweep the finger within the cervix, so as to separate the placenta from the lower segment of the uterus. If bleeding still continues, turn, bring down a foot, and either leave the case to nature or hasten delivery, according to the urgency of the symptoms.

Therapeutics.—The subject of antiseptics in private obstetric practice has been discussed, but no definite conclusion arrived at as yet. The general opinion seems to be: Use cleanliness *severely*, and interfere with natural processes as little as possible. In cases that required, or had been subjected to, extraordinary interference, the vagina and external genitals should be gently and carefully sopped with some disinfectant, but on no account with such violence as might uncover abrasions and open avenues for the absorption of products in process of decomposition.

The following remedies have lately come into deserved prominence: Viburnum prunifolium, in miscarriage; jaborandi, in albumuria and eclampsia; cocaine in vomiting of pregnancy, sore nipples and vaginismus. Perchloride of mercury gets the first place as a disinfectant or antiseptic.

Bibliography.—Many new and valuable additions have been made to the literature of obstetrics during the past year. So numerous, indeed, that a mere list of the titles of the works would occupy too much space for this report. I have had the pleasure and satisfaction of looking into two of them, "The Science and Art of Midwifery," by Mr. Thompson Lusk, and "A System of Obstetric Medicine and Surgery, theoretical and practical," by Messrs. Robert and Fancourt Barnes. Both works have been highly commended, and together make a fairly complete obstetric library for the ordinary practitioner.

A monogram, by our esteemed and energetic president, Dr. Holmes, on "Puerperal Mania," has been well received and favorably commented upon.

INTRACRANIAL INJURIES.*

BY DR. BLACKSTOCK, THOROLD, ONT.

My object in presenting the two cases described in this paper is not to herald any new mode of practice, either medical or surgical, but to demonstrate the possibility of recovery from traumatic injuries to the brain, however appalling they may appear to be. On the 28th of Nov., 1879, a frightful catastrophe occurred in a shingle mill in Saurin, a small village on the North Simcoe Railway. No one seemed to know exactly how or why the accident occurred, but the shingle saw jumped from its attachments, about eight feet to the north end of the mill completely severing the left arm of the sawyer about the middle humerus, after which it cut through four ribs, penetrating several inches into the lung tissue, and inflicting other severe wounds. I will dismiss this case by stating that with the assistance of my partner, Dr. Gould, I re-amputated the severed arm, and dressed the other wounds in the ordinary way, and the patient was able to walk about on the twelfth day after the accident, making a good recovery. In the south end of the mill a lad named Edward Denton, aged twelve, was packing shingles. The balance wheel, the rim of which was about three inches in diameter, parted in two, the end of one

* Read before the Ont. Med. Assoc. Toronto, June, 1886

half of which is supposed to have struck young Denton, who was about forty feet distant, above the ear crushing in a portion of the skull almost circular in shape, and about three and a half inches in diameter, involving the squamous portion of the temporal and inferior portion of the parietal bone. Saurin is about eight miles from Hillsdale, where I was then located, hence I did not arrive at the scene of the accident until about two hours after its occurrence. The boy was lying on a lounge in a semi-comatose condition. I found a fearful looking wound, in which blood, brain-matter and comminuted portions of the skull were freely mixed together, there being in particular one solid mass of brain-matter, weighing at least an ounce, upon the external surface of the wound. I could find but one small fragment of bone detached. There were four distinct openings in the scalp, and upon removing all the clots, both external and internal to the scalp, thus relieving the brain compression, the patient became conscious but could not speak ; in fact, it was about six weeks after the accident before he could articulate at all, and even at present writing his powers of speech are not perfect. As might have been expected, there was more or less paralysis of the arm and leg on the opposite side, although he recovered the power of the lower limb sufficiently for purposes of locomotion in about a year, but the arm still remains almost totally useless.

There were in all eighteen fragments of bone, which were removed or came away from the wound during a period of about six months after the accident.

Brain-matter was discharged freely from four openings for two weeks, but the severed portions of scalp finally cicatrized and the patient recovered so far that in about two years after the accident he could earn his own living by soliciting orders for magazines, books, etc. His mental faculties, when I last saw him, were perfectly normal.

The next case I shall lay before this Association was that of a young man named Deans, aged 18 years whose family resided near Gibson P. O., in the Township of Tiny. I was called to see him on the 8th October, 1881.

The patient had gone out shooting the previous afternoon. The event proved it was doubtful which end of the weapon was most dangerous when discharged. His friends found him next morning in the woods, he having lain there all the previous evening and night, during a heavy rain storm, and conveyed him home.

I arrived there (about 15 miles from Hillsdale) about 2 p.m. on that day. I found the patient stretched upon a sofa with a vertical wound in the upper part of the forehead, nearly in the median line, about three inches in length. Upon passing my finger into the wound I detected the small end of a screw nail, which I tried to remove by gentle traction. Failing in this I seized it with a strong pair of incisor tooth-forceps, directing two strong men to hold his head and shoulders firmly while I exerted all the muscular force I was master of in a vain endeavor to dislodge it. I then with a bone forceps removed a portion of the bone around the opening, after which, by a prolonged and supreme effort, I succeeded in removing not only the nail but the entire gun-breach to which it was attached, weighing in all exactly two ounces. As may be understood the screw nail passed through the projecting end or clip of the breach, and I suspected at first that it had in some way got bent upon itself at right angles, and the portion of it I could not see was caught behind the frontal bone. Therefore during my manipulations for its removal with the forceps I rotated the screw nail, and consequently the entire body of the gun-breach through the whole of the anterior portion of the cerebrum. The flow of brain-matter was so copious during each of such sweeping revolutions of the foreign body that I was forced to place a towel over the poor sufferer's eyes, nostrils and mouth, to prevent his being blinded or suffocated.

Strange to relate the patient was perfectly conscious and sensible during the whole of the operation which must have lasted at least half an hour and at times during the sweeping revolutions of the breech complained most bitterly that I was dragging his eye-balls into his brain. The patient recovered perfectly without a single bad symptom, and without the impairment of any of his faculties mental or physical. My assistant Dr. McGill or myself made several visits to him after the accident for a period of about three weeks. The wound cicatrized in due course and the young man attended school the following winter, and was I believe, preparing himself for a school-teacher, and enjoyed so far as I could learn the very best health. However about one year from the date of

the accident he was at a thrashing bee and was suddenly seized with vomiting and died before I could see him, so that whether his death was in any way connected with the accident or not I cannot state, although a post mortem would have been very interesting.

The treatment in both was essentially similar. Both patients were kept fully under the influence of morphia given in small and repeated doses. I ordered a pledget of absorbent cotton, saturated with a weak solution of carbolic acid to be applied lightly and constantly to the respective wounds. But my main reliance in both cases was the constant application of crushed ice in bladders to the whole of the head for from ten days to two weeks, thus playing, if I may be allowed the expression, a vigorous and successful game of "freeze out," with the threatened cerebral inflammation. Mr. President and gentlemen, the above is a "round and unvarnished tale" of the above cases written in haste and from memory merely. Had I been living in Hillsdale I could doubtless have been able to present you with the gun-breech and screw nail, as well as young Denton in the flesh. I may state, however, that I had the benefit and pleasure of my having friend Dr. Powell in consultation in the case of Denton, and am happy to state that I possess some of the larger pieces of bones removed from the skull of that interesting patient.

THE IMPORTANCE OF CIRCUMCISION.

BY H. G. ROBERTS, M.D., NEW GERMANY, ONT.

This operation is one that has been practised from the remotest ages. It is customary at the present day with the Christian Copts of Egypt, the Abyssinians, and many of the wild African tribes. It is older than the Koran with the Mahommedans, with whom and the Jews it is practised as a sacred rite. By many it is regarded as belonging peculiarly to the latter people. In America it is not practised at all except when circumstances demand it. The original object of the custom was probably the promotion of cleanliness, which is doubly necessary in hot countries. The fact must be apparent to every medical man that the want of circumcision, and consequently the want of cleanliness, is the direct cause of great discomfort and many diseases, both in old and young, even in temperate Canada; and I unhesitatingly say there are many lives lost yearly, and many suffering from balanitis posthitis, phimosis and cancer, that might be perfectly well, if this ancient custom were more generally practised. As an example of the fatal tendencies which follow a neglect of this operation, I will cite two cases I met with in practice last summer.

1. George K—— æt. 3 years and 6 mos. Was called to see him in July last. Had been under medical treatment for 4 months. Was given up to die of tuberculosis of the intestines. Found him very much emaciated, so weak he could not stand alone. He was evidently at death's door. He had exacerbations for 2 or 3 days of every week, when his temperature would be 103° F. or more, pulse 140 to 160. He seemed on my first visit to have inflammation of every organ between pubes and larynx, as he cried with pain on even the slightest pressure on abdomen or thorax. Face was covered with boils, stools fetid and mixed with blood, which seemed to confirm diagnosis of tuberculosis. Examined the penis which did not look at all sore, found the foreskin so contracted that I could hardly pass the probe; dilated it with dressing forceps and found it was adherent to the glans. Determined to operate having gained the reluctant consent of the parents who were very incredulous. From the state of the lungs and heart, I considered it unsafe to administer an anæsthetic, so I had the boy firmly held. I slit up the foreskin to a little above the corona. Had much difficulty in peeling the mucous lining from the glans, found lumps of smegma behind and adherent to the glans; stitched the mucous lining on either side to the integument, and washed the parts thoroughly with a solution of boracic acid. The boy never had a bad symptom afterward. His fever disappeared, the heart became regular, the appetite good, and he gained flesh and strength very rapidly. To-day he is a strong healthy lad.

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I am at a loss to account for so much constitutional disturbance from so small a cause, *i. e.*, the adherence of the prepuce to the glans. Is it altogether reflex irritation? or may it not be absorption of smegma and consequently blood poisoning? I would like to hear from some of your many readers on the subject.

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which swell the breast before lactation commences, and found in the breast after lactation has ceased until the gland acquires it wonted size. Curiously, too, we find cancer to have a marked tendency to crop up where the epithelium changes. Thus we find it at the lip where skin and mucous membrane meet; and also at the other extremity of the alimentary canal where skin and mucous membrane meet once more. Again, we see the tendency in the growth of cancer in the sulcus of the preputial fold. In the female we find cancer developing where the columnar epithelium of the uterus gives place to the squamous epithelium of the vagina.

Another curious clinical fact with which we are familiar is the different manifestations of gout in various persons. "The broad gouty persons suffer rather from articular gout, gouty disease of the heart and eczema, who are usually free from dyspepsia and nervous disorder of the heart, but who certainly are liable to bronchitis. The gouty man of thin flank is not so liable to articular gout, heart disease, or bronchitis, but is liable to nervous disturbances, skin trouble, and dyspepsia. Just as the external appearance or physique differs, so does the form of their gout, and also the treatment of each. The massive, solid, gouty folk might be fitly spoken of as the Norseman type, while the other slighter folk of highly developed nervous system, but lighter in the bone, might be classed as of the "Arab type;" of course there are blends" ("The Diseases of Sedentary and Advanced Life"). Now what relation do these morbid manifestations bear to early fœtal devolopment? We find gout in the large massive people, fixing itself upon the outcomes of the mesoblast, the motor layer. The articulations suffer in the Norse gouty man, and the heart, which in some respects closely resembles a joint (Hilton on "Rest and Pain"), while in the persons of high nervous development, but lighter in the bone—the gouty Arab—disturbances of the nervous system and the skin rather are manifested; both derived from the epiblast, the one from the corneal, and the other from the medullary division of that outer embryonic layer.

Valvular lesions of the heart cause also a reversion, or return to an earlier primitive form of heart. The original primitive heart consists of a pulsatile muscular sac emptying and filling rhythmically; a certain amount of blood flowing backwards as well as forwards at every systole. Gradually, valves are developed by which regurgitation on systole is prevented, and so the muscular power is economized. What do we see when these valves are injured and rendered incompetent by disease—a return to the condition of the primitive muscular sac. The heart becomes lowered or truly degraded, approaching the primitive form of heart. Deprived of the advantage gained by the development of valves, we look to hypertrophy of the muscular wall to compensate the valvular injury, *i.e.*, in other words we hope to secure a heart of lower type. With the extent of the lesion, that is the injury to the valves, goes the general capacity of the body, and the completeness of the muscular compensation. If the lesion be a small one the muscular compensation is readily secured, and well maintained, the individual being little worse. But if the injury be a large one, so that the heart is greatly degraded, and approaches a valveless muscular sac, the muscular compensation is necessarily imperfect, and quickly wears out, the organism being seriously crippled.

Degeneration in the nervous structures gives us a striking example of dissolution as compared to evolution. The large cells and coarse fibres of the primitive brain centres developed at an early period of embryonic life are followed at a later period by "the finer cells and thin fibres of the accessory portion of the brain." When degenerative changes are afoot we see the nerve structures dissappearing in the inverse order of their appearance. Those which came late go first; while those which came early manifest greater resisting power. The vascular supply has something to do with this fact, the nerve centres of early development being more favourably situated as regards their blood supply, than those which follow.

From these illustrations we can see, as through a glass darkly, that disease is not merely morbid change, but to a certain extent, the undoing of evolution; a species of degradation or reversion being entailed thereby, or in other words, a dissolution, or return to more primitive and lower forms of life.

We can recognise the law of development acting within closer and more restricted limits in the spread of disease amidst races unprotected by experience, as for instance, in the spread of small-pox amongst aborigines, and phthsis among the South Sea Islanders. On the other hand, it is a notorious fact that the negro is practically safe against, and exempt from yellow fever.

The history of "Yellow Jack" throws a curious and lurid light upon the recognised clinical fact. Yellow fever hangs around the harbours frequented by slavers in the old days of the iniquitous slave trade. Any one who has seen pictures of the way the unhappy negroes were packed to economize space in the slave-ships can comprehend what must have been the miseries and the horrors of "the middle passage" in the heat of the tropics. Myriads perished on the way: and the slave ships reached the American shores charnel houses simply. Discharging the remnant of their cargoes—their wretched human freight—these ships were then thoroughly cleansed and scoured; and the foul discharges of the ill-fated Africans were cast out into the sea. There they were deposited as a sediment at the bottom of these harbours; many of them

comparatively tideless bays. There they remain the unseen evidence of the wrongs suffered by the black races at the hands of the white man; and when from any cause this toxic mud is disturbed, up springs an endemic outbreak of yellow fever, which claims the white man as its victim, leaving the negro comparatively untouched. The avenging deities indeed have their feet shod with wool?

Yellow fever is then the echo or refrain of the horrors of "the middle passage." The unsought revenge of the enslaved African upon his white-skinned oppressor!

Such then are some of the aspects of disease forced upon us by extending information and deepening insight. They reveal to us far away mysterious, curious links and associations with the past. Disease, pain, suffering, incapacity, mental and bodily, which in our text-books are referred with shallow penetration to immediate palpable causes, we find really depending for their foundation upon something lying deeper down than etiology. We can see that many morbid manifestations involve inheritance extending backwards to far away ancestors. Others we see are but further and later extensions of embryonic development; the elements of one layer preying upon and despoiling those of the others under abnormal and favouring circumstances. The practical outcomes of such study of disease is to recognise how underlying, unrecognised proclivities and potentialities may be awakened and roused into active existence, often by the life-habits of the individual.

Thus indulgence in alcohol may start up a superabundant growth of connective-tissue encroaching upon and destroying the true gland elements of a viscus in cirrhosis. We can realize how prolonged abstinence from fat can bring about, in those predisposed by descent thereto, a growth of tubercle—lowly connective tissue often too degraded to live, and carrying with it to its grave the organism in which it has developed. We can comprehend how indulgence of the palate overtaxing the liver can set on foot a retrograde movement which brings the human liver down to the grade of the liver of reptiles. When gout is set up we can discern it moving on certain lines mapped out in the early embryo in its different victims; which we unconsciously recognise when we apply the term "diathesis" thereto. When nervous degeneration is afoot we see the latest nerve groups to be developed are the first to go—the latest outcomes of evolution the first to perish in involution. We can even perceive a certain moral retribution in yellow fever, the scourge of the white man, passing over the lowly African, and haunting the resorts of slave-traders. We can see, indeed, the present resting upon the past in a thousand ways.—*The Med. Press and Circular.*

THORACENTESIS FOR PLEURITIC EFFUSION.

Among the subjects which occupy a sort of middle ground between the general practice of medicine and that of surgery, none is of greater interest or of greater importance than the question of the proper management of serous effusion into the pleural cavity. In regard to the treatment of empyema there is little difference of opinion; but in the treatment of purely serous effusion different practitioners hold diametrically opposite opinions. Some rely almost exclusively upon medicinal remedies, while others believe in early operative interference.

There are two principal reasons assigned for preferring medicinal treatment: First, it is sufficient in the great majority of cases to effect a cure, and it is safe; and, second, operative procedures are not more efficient, while they are dangerous.

In the defence of operative interference these reasons are directly reversed, and puncture of the wall of the thorax is asserted to be the best way of getting rid of the immediate and remote effects of an effusion, while, if properly conducted, it is almost entirely devoid of danger.

To decide which of these opposite opinions is correct, or what mean between them may be adopted, is not an easy task. But something may be gained by examining the grounds upon which they rest.

The efficiency of purely medicinal measures in the treatment of moderate pleural effusions cannot be doubted, nor can the assertion that it has sufficed for very large effusions be denied. To select but a few illustrations of this fact, Barbe, who is not afraid to operate, reports, in the *Archives Générales de Médecine* for May, 1885, a large number of cases cured by the use of iodine externally, and of certain internal remedies. In some of his cases the effusion was estimated at as much as four pints. By the method which Körner of Graz, first used in 1863—which consists in the withholding of fluids from the patient and in the administration of salt — some remarkable results have been reported. Thus Glax, in the *Zeitschrift fur klinische Medicin.*, Bd. ix. Heft 5, records twelve cases in which the exudate filled or almost filled the pleural cavity, and in which a cure was effected in an average of twenty-two days. Similar results have been reported by other trustworthy observers.

In the face of such facts, and of the opinion of many of the best clinicians, it must be acknowledged that in most cases the medicinal treatment of pleural effusion is entirely efficient, so far as getting rid of the effusion is concerned. Whether or not it is entirely safe, depends somewhat upon the way in which this word is applied. It is safe enough so far as the immediate result is

concerned. But is it safe when the ultimate issue of the case is considered? Those who favor puncture of the chest wall assert that there is great danger to the lung from delaying its expansion, danger of adhesion, of consolidation, of retraction of the chest wall, and of permanent dislocation of other organs.

These accusations are somewhat vague, and, so far as we know, are not supported by any carefully prepared statistics. Still they deserve consideration, and the well-recognized fact that attacks of pleurisy often precede the outbreak of phthisis, to which Chauvet has recently called attention in the *Lyon Médicale*, May 24, 1885, may indicate some imperfection in the method of treating pleurisy. This point, however, should not be strained any more than another, which is made against operative interference, that the outbreak of phthisis which sometimes follows is to be attributed to it.

The negative evidence in favor of the medicinal treatment of pleural effusion lies in the asserted danger of puncturing the pleural cavity. This is said to consist in the risks of septic infection, of converting a serous effusion into empyema, of arousing into activity a latent tendency to tuberculosis, and a certain danger of wounding the lung. The last of these dangers is hardly of much significance, the next to last probably owes its terrors to the mistake of taking *post hoc* for *propter hoc*. The danger of septic infection and of converting a serous effusion into an empyema is very real, and there have been only too many exemplifications of it. But it is an error to suppose that the danger is inevitable. With proper antiseptic precautions there is scarcely any reason why tapping the chest should subject the patient to risk of this sort. It is possible, of course, that the aspirating needle or trocar may pass through the fluid and wound the lung, so that from it a source of putrefaction or of specific disease shall gain access to the cavity of the pleura. But this is very unlikely to happen, and no virulent material ought to come from without if the operation be done correctly. That this, however, does sometimes take place only shows that those who have had such results have something to learn in regard to the principles and practice of asepsis.

It cannot be maintained that there is any considerable danger in the operation of thoracentesis when done carefully, and the choice between it and medicinal treatment must be determined by the estimate of their relative efficiency, and especially by the suitability of either to each particular case.

In some cases the most conservative medical man feels constrained to tap, in others all but extremists would hesitate to do it. Aufrecht, in the *Berliner klinische Wochenschrift*, No. 10, 1886, maintains that small effusions—which may be cured by salicylic acid—should not be tapped, but when the effusion reaches the third intercostal space in front, the fluid should be let out; and this he believes to be a good rule even when the symptoms do not seem to threaten life. But it is not well always to empty completely the pleural cavity. Aufrecht thinks that more than five pints should never be withdrawn at one sitting, and Barbe, in the paper above referred to, is of the opinion that tapping need not be resorted to until the accumulation amounts to about two quarts, and that only half of this should be drawn off at a time. His opinion is founded on an experience of fourteen cases, in which he made twenty-seven punctures, and in which there were no subsequent paroxysms of cough, or serous expectoration. In Aufrecht's experience, morphia subdued the paroxysmal cough perfectly.

Very recently Heitler, in a paper in the *Centralblatt fur die gesammte Therapie*, for June, 1886, has advocated active interference in pleural effusions. He does not believe that early puncture can abort a pleurisy, and recent French experience has demonstrated that putting such a belief into practice has led to an increased mortality. Aufrecht does not overlook the fact that desperate cases have recovered without tapping. But he regards the presence of either a very large effusion, a rapid rate of effusion, or a long persistence of the effusion as a sufficient indication for operative interference. What he means by long persistence of the effusion may be gathered from the statement that thoracentesis should be practised if the effusion remains stationary for two or three weeks, and shows no tendency to resorption. Stöhr, in an inaugural thesis, Erlangen, 1885, came to much the same conclusion. He analyzed fifteen cases of operation, and considered the proper indications to be urgent symptoms, great effusion, rapid accumulation, and considerable displacement of the viscera.

In all that has been said thus far, it has been assumed that the discussion refers to simple serous effusions. For purulent, ichorous, or hemorrhagic effusions, the propriety of tapping, drainage, and washing-out, seems to be beyond question. But even in deciding what is to be done for an effusion supposed to be purely serous, it must not be forgotten that it cannot always be certainly determined without resort to hypodermatic aspiration. Polaine, in the *Gazette des Hôpitaux*, Nos. 38 and 130, 1885, has asserted that there are no certain signs of the nature, nor of the amount of an effusion. This view may be an exaggerated one; but the possibility of error in this respect should not be overlooked.

In conclusion, we think that it may be said that medicinal treatment suffices for the relief of the great majority of cases of serous effusion in the pleural cavity, but that tapping should be resorted to when a rapid accumulation produces dangerous

symptons, or when long persistence of a large effusion makes it likely that this may cause irremediable changes in the lung or chest wall. The assertion that phthisis may be provoked by a properly conducted tapping is not borne out by a study of a large number of cases, and the risk of converting an innocent effusion into a dangerous one, we believe to be dependent upon circumstances which can be avoided.—*Med. News.*

ON THE VALUE OF BORIC ACID IN VARIOUS CONDITIONS OF THE MOUTH.

Boric acid is now officinal, and justly so. It has long been used in various metallurgical and ceramic operations, and more recently its preservative power has been abundantly demonstrated. It is this antiseptic power which gives it its great therapeutic value. It is a very stable compound—one of the most stable of the acids; it is not volatile, and only exerts its action when in solution; fortunately, however, it is soluble in more than one menstruum. Up till now, its chief application has been in connection with modern surgery, where the boric ointment, lint, and lotions all hold a prominent place. There are spheres of usefulness for it, too, in medicine; and one of these is in diseases of the mouth. It is the benefit of its local action we usually wish to gain, for, though sometimes given internally—as in irritable conditions of the bladder—its topical antiseptic effect is more often desired. In connection with its local application in various diseased conditions of the mouth, its solubility in water and glycerine, its unirritating character, its comparatively innocous nature, and its almost tastelessness, are greatly in its favor. More particularly is this the case in treatlng such conditions in children, whose oral cavities cause them so much annoyance. Speaking generally, boric acid will be found useful in all conditions of the mouth, fauces, pharynx and nose, where there is any abrasion of the epithelium; whether it be used as a powder, gargle, mouth-wash, pigment or confection. More definitely, I may say, it is not contra-indicated in any of the forms of *stomatitis*, though scarcely severe enough for the graver varieties.

In *simple catarrhal stomatitis*, a mouth-wash, containing from 10 to 15 grains to the fluid ounce, speedily cures the condition, and exercises the same beneficial influence in the *ulcerative* form, though there, in addition to the rinsing of the mouth, a local application in the form of the powder or pigment should be made to the individual follicular ulcers. The powder simply consists of finely powdered boric acid, mixed in various proportions with starch; the pigment is a solution of boric acid in glycerine (1 in 4 or 5). In both cases, the addition of chlorate of potassium is advantageous; indeed, I usually combine it, but it is not essential.

Nothing I know of is at once so rapid and so efficient, in the treatment of *parasitic stomatitis* or *thrush*, as this remedy. The youngest children do not object to its application, and, occasionally, you have to caution against its too frequent use. The *oidium albicans* quickly succumbs to its influence. I am well aware of the great value of nitrate of silver in many of these conditions; but, I am also alive to its extremely disagreeable and persistent taste, and the dislike which precocious children at once take to it. For thrush in children, I especially recommend boric acid, either as a mouth-pigment or as a confection. Honey and sugar have both been condemned, as being inadmissible, in combination, for the treatment of thrush; but, so far as children are concerned, I must say I consider a confection (though made with honey), which has been impregnated with boric acid, gains more by its palatableness than it loses by the tendency of the saccharine matter to further the growth of the fungus. The boric acid at once does away with this tendency. Let the pigment be frequently painted with a brush over the patches, never omitting to do it after food has been taken; or, a little of the confection simply allowed to dissolve in the mouth; and the days of the fungus will soon be ended. I have found boric acid, combined with its salt (borax), markedly beneficial. Borax alone, however, is not nearly so good.

In *pharyngitis*, and *relaxed conditions of the throat*, a gargle, containing boric acid and glycerine, with either tannic acid or alum in addition, ought not to be forgotten.

Let me allude to another condition, in which I have found combinations of this substance helpful and grateful to the patient. I refer to the condition in which we frequently find the mouth, tongue and teeth in severe cases of typhoid fever. The mouth is hot; the lips dry, cracked, and glued to the sordes-covered teeth by inspissated mucus and saliva; the tongue dry, or even glazed and hard, brown or black, crusted with a fœtid fur. Under such circumstances, a pigment containing boric acid (30 grains), chlorate of potassium (20 grains), lemon juice (5 fluid drachms), and glycerine (3 fluid drachms) yields very comforting results. When the teeth are well rubbed with this, the sordes quickly and easily becomes detached; little harm will follow from the acid present. The boric acid attacks the masses of bacilli and bacteria; the chlorate of potassium cools and soothes the mucous membrane; the glycerine and lemon juice moisten the parts, and aid the salivary secretion. I consider this application well worth a trial.

So much for the soft parts; a word in conclusion regarding the teeth. Few medical men, I suppose,

have ever given a prescription for a tooth-powder (such a matter is beneath their notice), and the selection of the ingredients for the various powders and pastes in vogue for the purpose of beautifying and cleansing the teeth is left entirely in the hands of those who certainly should not know better than medical men. I have frequently trespassed on this debatable ground, and recommended a particular dentifrice. In view of the extremely important part the teeth play in the economy of life, I never hesitate occasionally to inquire as to the attention they receive.

A tooth-powder should possess certain characteristics; it should be antiseptic, cooling, agreeable to taste and smell, and have no injurious action on the teeth. After use, it should leave the teeth white, and a sensation of freshness and cleanliness in the mouth. As an antiseptic in this connection nothing can displace boric acid. For years I have used the following powder, and can recommend it: Boric acid, finely powdered, 40 grs.; chlorate of potassium, ʒss; powdered guaiacum, 20 grs.; prepared chalk, ʒi; powdered carbonate of magnesia, ℈i; attar of roses, half a drop. The boric acid in solution gets between the teeth and the edges of the gums, and there it discharges its antiseptic functions: the chlorate and guaiacum contribute their quota to the benefit of the gums and mucous membrane generally; the chalk is the insoluble powder to detach the particles of tartar which may be present, and the magnesia the more soluble soft powder which cannot harm the softest enamel.

It is only right to say that boroglyceride (Barff) can replace boric acid in almost all the forms of administration I have enumerated; it is efficacious, sightly, and pleasant to the taste.—*British Medical Journal.*

TESTING HOUSE-DRAINS.

At a conference in connection with the Building Exhibition held in London under the auspices of the Society of Architects, Mr. R. K. Burton described methods used by himself in testing the soundness and arrangement of house-drains. Three questions, he said, were to be decided: (1) Is the drain water-and-gas-tight? (2) Is it self-cleansing? (3) Is it disconnected from the sewer? The first point is best decided by a test; but it is well to observe the appearance of the joints before taking the trouble to apply any test, as such may at once reveal the fact that the drain is leaking. In more cases than those who have not made many inspections would imagine, it will be found that there is absolutely nothing in the joints of the tile-drain. In others it will be found that there is clay only, and he had never known a clay-jointed drain to be water-tight. In still other cases it may appear, from looking at the tops of joints, that they are carefully made with cement; but when a rod of iron or a chisel is plunged into the earth underneath them, it comes up wet and black with sewage. It is only when none of the appearances described are to be seen that it is worth while applying a test. The best undoubtedly is the water-test. In this the drain is opened by the removal of a pipe, and is plugged.

It will be found impossible to fill more than perhaps about one out of three drains, except in houses which have been very recently remodelled, and that it is necessary to avoid pouring too much water into a leaky drain. If the drain does fill up the running water is stopped, and it is observed whether the water in the gullies or surface-traps remains at a constant level. The test next in efficiency to that by water is the smoke-test. The next question is as to whether the drains are self-cleansing or not. As in the case of the water test, an opening must be made; but it is not needful to remove a whole pipe. It is sufficient to chip a round hole in the top of one. If no deposit appears just under the opening, water is allowed to run into the drain at the upper end, and the flow is observed at the opening. If the water runs briskly and clear past the opening all is right. If, however, it comes tardily, and carrying deposit with it, it is a question of ascertaining the cause. A drain, if well laid, should, with a fall of one in sixty, clear itself. A house-drain should seldom or never be larger than six inches; four inches is large enough for very small houses, and if five inches were the size generally made, it would probably be better than either four inches or six inches for the majority of houses. Now as to whether the drain is disconnected from the sewer or not. To make absolutely sure whether or not there is a concealed trap on the drain, if the opening does not reveal this, the only plan is to pass rods down the drain. One may, however, have evidence approaching to certainty by burning a match in the drain, and observing whether or not there is any current of air through it. If there is, it may be assumed that there is no trap on the drain. It is necessary to test each branch for self-cleansing properties. The material for soil-pipes should be ascertained by removing the wooden casings which generally cover them. If an internal soil-pipe is made up of light cast-iron pipes (rain-water pipes), and lead junction-pipes for the closets it may be condemned without any further investigation. The best test for a whole-drainage system is undoubtedly the smoke-test. This test consists essentially in filling the drainage system with smoke at some pressure, and observing whether or not it issues at any place other than the openings intended for ventilation.

Smoke-rockets are now largely used by those who have to make inspection of sanitary arrangements. These consist of paper cases, filled with a composition which gives off a vast quantity of smoke at

a considerable pressure. The smoke-test can never be taken—when it gives negative results—as an absolute test for drains. The peppermint-test is inferior to the smoke-test when the latter is properly applied, in the speaker's opinion. The next thing of most importance to do is to trace the overflow-pipes of the cistern to see whether these are connected with the drain or not. A connection of any kind between a cistern and the drain is a thing to be condemned. The baths, sinks, basins, etc., come next under examination. The discharge-pipe—and overflow, if there be one—of each of these must be traced to discover whether or not it is connected with the drain. The closets must be very carefully examined, although they are not nearly so often the points of ingress of sewer-gas to the house as in any other appliances, such as sinks. They are often, however—especially when of the old pan form—themselves generators of foul gases, and as such objectionable.—*Med. News.*

THE FATE OF EXTRAVASATED BLOOD: AN EXPERIMENTAL RESEARCH.

The object of the research was primarily to determine the share taken by the liver, the spleen, and the bone marrow, in the disposal of extravasated blood. The method of research was the transfusion of large quantities of blood into the peritoneal cavity, the blood being, in all cases, derived from an animal of the same species. The animals used were the rabbit and dog.

I. *Local Fate.* 1. The part taken by cells in the local changes going on around extravasated blood is of the greatest importance; the cells being of two kinds—those of leucocyte, and those of connective-tissue origin. 2. The formation of blood-pigment from the red blood-corpuscles is mainly a "cellular" process, being effected through the agency of cells, either by inclosure of the corpuscles bodily within them, or by disintegration of the red corpuscles and then inclosure of their fragments. 3. In the process of so-called "organization" of blood-clot, both varities of cells play an important part; but, while both leucocytes and connective-tissue cells are concerned in the disintegration of the red corpuscles, the former in addition, effecting the removal of the *debris* from the seat of extravasation, the connective-tissue cells alone are concerned in the process of formation of fibrous tissue by which ultimately the clot becomes replaced.

II. *Absorption.* 4. The absorption of extravasated blood applies not only to the serum of the blood, but also to the great majority of the red corpuscles which remain unentangled amidst coagula or the surrounding tissues. 5. This absorption is extremely rapid, both from the subcutaneous tissues but especially from the larger serous cavities. 6. In the case of the peritoneal cavity, the absorption of the serum and red blood-corpuscles is effected almost entirely through the lymphatics of the diaphragm. 7. Under such circumstances, the increase in the number of corpuscles within the circulation is observable one hour after injection, and steadily rises till it reaches a maximum about the second or third day, the time varying according to the quantity injected. 8. Extravasation *per se* does not affect the vitality of the red blood-corpuscles; if absorbed back into the circulation within a day or two, they continue to live as before. 9. Their longest duration of life under such circumstances (in the rabbit) varies from two to four weeks, this duration applying naturally to only a few of them. 10. The probable life-duration of the red blood-corpuscle in man is about three weeks.

III. *Ultimate Fate of the Absorbed Corpuscles.* 11. The three great seats of blood-destruction within the body, under pathological as under physiological conditions, are: The liver, the spleen, and the bone marrow. 12. The nature of the process of destruction in the liver, differs essentially from that in the spleen and bone marrow. 13. In the latter the process of blood-destruction is mainly a cellular one, comparable in all respects with, although much more rapid and complete than, the the similar processes taking place locally at the seat of extravasation; in the former, the destruction is much more rapid than in the spleen and bone marrow. 14. After increased destruction of blood-corpuscles within the body, the local evidences obtainable are—in the case of the liver, increased richness of its substance in iron and the presence of granules containing free iron within the liver-cells; in the case of the spleen and bone marrow, increase in the amount of pigment containing free iron found within these organs. 15. In health, a definite relation is maintained between the amount of blood-destruction which takes place in the liver on the one hand, and in the spleen and bone marrow on the other. 16. Any disturbance of this relation on the part of the liver is of much greater consequence than on the part of the spleen or bone marrow. 17. The former is, in all probability, the pathological change which lies at the root of progressive pernicious anemia; as the latter is the probable cause of the anemia of leucocythemia. 18. The rapidity with which blood-corpuscles introduced into the circulation become destroyed is very great, a number equivalent to about 4 or 5 per cent. of the animal's own blood being destroyed daily. 19. The small quantity of blood transfusible into the organism in the case of man is therefore entirely removed from the body in a few days at most, probably not longer than three or four. 20. Transfusion of blood in the human subject, in cases of pernicious anemia, with the object of increasing the number of corpuscles, is devoid of all physiological basis,

and is simply adding fuel to the flame, since the fault in this disease is not one of defective formation of blood-corpuscles, but one of excessive destruction of those already present. — *William Hunter, M.D., Edin. (Brit. Med. Jour.).*

ON THE PRACTICAL APPLICATION OF THE PNEUMATIC CABINET.

This I believe to be the main action of the cabinet, the reduction of pulmonary congestion, and the theory is practically verified by our experience with regard to blood-spitting and bronchial hemorrhage. Time and again patients have come into the office complaining of the sputa being blood-streaked, and, almost without a single exception, the use of the cabinet has relieved the symptom in the course of a few minutes.

In addition to the effect it has upon the pulmonary congestion, it undoubtedly acts beneficially in other ways. The thoracic gymnastics afforded by expiration against increased resistence will probably be of benefit to the weak-chested. The increased oxygenation of the blood will doubtless improve the nutritive processes. Then the spray, if proper medicaments are used, may be expected to act beneficially upon the accompanying bronchitis. I was not able to follow fully Mr. Ketchum's argument in regard to the condensation of the spray in the deeper air-passages. It occurs to me, though, that our difficulty has been not to cause the condensation of the sprays heretofore used in the medication of the air-passages, but to prevent their condensing too soon. There will be no trouble in making the spray condense if it can once be got where it is wanted ; but I have most serious doubts whether it reaches beyond the primary division of the bronchi. Treatment by this method has been spoken of as the antiseptic treatment of phthisis, and by this I suppose is meant that the germs of the disease are supposed to be killed by medicament contained in the spray. In this view I have no faith whatever, but regard it as wholly visionary, and without the slightest foundation either in reason or in fact Admitting that the *Bacillus tuberculosis* is the one and only cause of the disease, which is not proved ; that its destruction will cure the disease, which is still further from being proved ; that a small portion of the spray is carried into the alveoli, which is not probable—we are still very far from proving even the possibility of reaching the germs in this manner, for the bacilli, incased as they are in tubercular and caseous masses and in thick mucus, are well protected from even the very minute amount of our disinfectant which we may imagine ourselves able to carry into the deeper air-passages. The pneumatic cabinet is undoubtedly a most valuable addition to our armamentarium for the treatment of thoracic diseases, but it is too much to expect it to go to the root of the evil, and it must be regarded as an adjunct to, and not as a substitute for, such other means of enabling the patient to fight off the disease as we have at our command.

In regard to the results of the treatment Dr. Westbrook has spoken. Dr. Westbrook and I have used the cabinet for about eight months, with about the same kind of results as those reported by Dr. Fox. We are not ready yet to report our cases in detail.

In regard to the dangers which have been spoken of, undoubtedly there is some degree of danger, but the danger in the use of anæsthetics does not prevent our use of them. The risk of producing copious or fatal hemorrhage has been mentioned. Our experience has satisfied us that bronchial hemorrhage can be stopped by the use of the cabinet. It is hardly conceivable that, with any pressure which one would be apt to use, the lung substance could be torn. If cavities exist in the lung, the air enters not only the cavities but the surrounding alveoli, so that the walls of the cavities cannot be greatly stretched. Of course it is imaginable that a portion of lung might be so far disorganized that an inspiration of greater than usual depth might rupture a vessel—in such cases, for instance, as are described where the vessels lie exposed in the walls of the cavities or stretch across them from side to side, the walls of the arteries themselves being probably disorganized. But such vessels as these would hardly be worth saving, for they would be certain to rupture before long, and the worst that the treatment could do would be to determine the time of the accident. A more real danger I believe to be that of producing emphysema. The lungs can doubtless be seriously injured in this way by an injudicious use of the cabinet ; but, by using care in regulating the pressure and watching the condition of the patient's lungs by repeated examinations, this evil can be readily avoided.—Dr. Platt in *Med. Jour.*

CHLORIDE OF SODIUM IN BRIGHT'S DISEASE.

This is certainly a very simple remedy, yet Dr. Allard Memminger of Charleston, S. C., highly lauds it in the *N. Y. Med Jour.*, July 31. He has only tried it, so far, in four cases ; but his observations are of value, because it alone was used, to the exclusion of all other drugs. At first he orders ten-grain doses of the chloride, contained in gelatine capsules, three times a day, and, if the state of the case allows, by preference one hour after or before meals. He generally reverses each day the order of giving ; thus, if one day the capsules are given before meals, the next day they

are prescribed after. If the patient complains of no nausea, he allows him to keep up; but at the slightest intimation of a sick stomach, he orders him immediately to assume the recumbent posture, and there remain for an hour or so, after which this temporary ill feeling always subsides. The second day of treatment he increases the dose to two capsules three times a day, and every other day he increases by one capsule until the patient is taking five capsules three times a day. About this time the good effects of the treatment will be apparent, not only from the improved subjective and objective symptoms of the patient, but from the improved condition of his urine. Albumen will, of course, at this period, be found still in abundance—that is, if the case is at all a grave one; even here, however, if you institute a gravimetric examination, you will find a decided improvement, not so much in the absolute as in the relative decrease in albumen.

At this juncture he orders the chloride to be diminished in quantity; and he has so far found, that, after the system has been brought fully under its influence, it requires but two capsules three times a day to keep up the desired effect. If at this stage of the case there is any decided nausea or disinclination to take the medicine, he stops the same, and during the interval gives one or two alterative pills, after which he proceeds again to a resumption of the chloride. Should albumen again increase in the urine, urea and chlorides diminishing, he immediately resorts to large doses, thus bringing the patient once more under the influence of the chloride, after which he again reduces.

The effects of this treatment are most marked. Headache, œdema, low spirits, general weakness, and anæmia give way to just a reverse order of things; and the patient, who a few days before was most gloomy and desponding, is now full of life and hope.

Thus has it appeared to him in each of his four cases; and, if he has been led to express views that to many may appear extreme, it is because his convictions are based upon clinical observations which, up to this time, he has never had the pleasure of recording with any other form of treatment. He would, therefore, urge a thorough trial of this therapeutical agent by the profession, on the following grounds:

1. It is harmless if properly administered.

2. Its effects are comparatively uniform, provided it is given for a sufficient time. That he has so far used it only in chronic cases of no long standing does not, in his opinion, militate against its beneficial effects; for, even should it not be found a cure for Bright's disease, may it not become an important article in our medical armamentarium — indeed, if only an ameliorator of man's sufferings and a prolonger of his life?

3. It may be employed as an adjunct to all recognized methods of treatment without detriment to the patient.

Thus, then, he asks the practitioner, teacher, and scholar, does not an array of such facts, coupled with the well-known physiological action of chloride of sodium, demand from each and every one of them a fair and honest trial in this most formidable of diseases?—*Phila. Med. & Surg. Rep.*

MEDICAL NOTES.

Chronic Rheumatism.—Liq. potassii arsenitis, ʒss.; Potassii acetatis, ʒ iij.; vini colchici rad, ʒij.; ext. cimicifugæ, fl., ʒiij.; ext. phytolacca, fl., ʒiss.; aqua menth. pip, ʒiij. M. Sig. Two tablespoonfuls in water every four hours.

Dr. Sajous uses a solution of argent nitras, gr. x to fʒj, on a cotton-wrapped probe, for *hypertropic nasal catarrh.*

Prof. Bartholow teaches that the best way to treat *poisoning by corrosive sublimate*, is to get all the eggs possible into the patient, and then bring about prompt emesis.

In mitral regurgitation accompanied by pulmonary congestion, Dr. Rex prescribed at the Jefferson Hospital, the following:—

℞ Infus. digitalis,
Mist. ferri et ammonii acet., aa. fʒj. M.
Sig.—Take three or four times daily.

Speaking of *purgatives*, Prof. Bartholow told of an old soldier who always carried about him a bullet, which he had used for *forty years* as a cathartic. It acted by its weight.

Dr. Hearn, for *cystitis* and *irritabte bladder*, gave at the Jefferson College Hospital—

℞ Sodii bromid., ... ʒss
Tinc. hyoscyami, ... fʒss
Syrup.,
Aquæ . . aa . q.s. ad fʒiv. M.
Sig.—Teaspoonful ter die.

In a case of *infantile eczema*, Prof. Bartholow, besides directions given as to diet, placed the child (aged two years) upon tinct. belladonnæ, gtt. v. ter die, or sufficient to cause dryness of the mouth. The object in view is to affect the cutaneous circulation, and thus bring about the desired result.

—Treat *lumbago*, when rheumatic, by salicylates especially by the salicylate of cinchonidine. Locally, you may inject fʒss of water into seat of trouble; if pain be considerable, use also gtt. v-xv of chloroform. You may also use galvanism or faradism in currents whose strength shall only cause titillation. (Bartholow.)

Prof. Da Costa gave the following formula for

chronic diarrhœa, the passages being watery, containing no blood or mucus, and there being no tenderness:—

℞ Opii . . . . . gr. ss.
Plumbi acetatis . . . . . gr. ij. M.
Ft. pil.
Sig.—every four hours.

In treating *chronic eczema*, place your patient upon a farinaceous or a mixed diet. Locally, an ointment which will give good satisfaction is composed thus:—

℞ Ung. hydrarg. nitratis.
Petrolat. . . . aa . . . ℥j.
Ung. picis liquid. . . . . ℥iv. M.
Ft. Ung.
Sig.—As an ointment. . . . . (Rex.)

For *chronic rheumatism*, Prof. Da Costa prescribed as follows: Avoid nitrogenous foods: take plenty of exercise, and use alkaline baths freely each evening; also—

℞ Potas. iodid. . . . . gr. v.
Tinct. colchici sem. . . . . gtt. vij.
Syrap. zingiberis
Aquæ . . . aa . . . f℥ss. M.
Sig.—Ter die.

In *amaurosis* resulting from over-indulgence in tobacco and alcoholic drinks, with a co-existing anæmia and general debility, Prof. Bartholow suggested the following plan of treatment: Pay proper attention to food, selecting good, nutritious and easily assimilated articles of diet. Give ol. morrhuæ and the phosphates, combined, perhaps, with the bichloride of mercury; and directed immediately to the amaurosis, order the occasional injection of $\frac{1}{60}$ gr. of strychnine into the temple.

Prof. Bartholow, for a man with *pseudo-anginæ*, ordered the following: Improve nutrition by—

℞ Ferri arseniat. . . . . gr. $\frac{1}{6}$
Ext. nucis vomicæ . . . . . gr. $\frac{1}{4}$
Ol. morrhuæ . . . . . ℥j
Syrup
Aquæ . . . . aa . . q. s. M.
Sig.—Ter die, after meals.

For the attacks of angina, sol. nitroglycer. contesimal, ♏i, to be increased to characteristic effects.

To tone the nervous system and improve blood in *chronic pleurisy*, Prof. Da Costa directed—

℞ Tinct. ferri chloridi . . . f℥ss
Acid. acetic. dil. . . . . f℥iij M.
Adde—
Liq. ammon. acetat. . . . f℥vj
Elixir. simplicis . . . . . f℥ix
Strychninæ . . . . . gr. ss. M.
Sig.—Dessertspoonful ter die.

—*Col. & Clin. Record.*

IRRITABLE WEAKNESS.

EVERY student of medicine knows, when he is questioned on the subject, that there is no hard-and-fast line between the normal and the abnormal; that physiology runs into pathology. It is a mistake to describe life as a very slight process of inflammation, though in a certain curious fashion it may be so considered. Normal nutrition contains within itself the elements of inflammation, which is, in fact, an exaggerated and perverted condition of healthy tissue and vascular action. Whenever differences in degree are the subject of discussion, there is fertile ground for paradoxical statements.

The transition between healthy mental action and delirium is an almost imperceptible one, as is likewise the gradation between normal movements and abnormal ones. The mind is considerably exercised to understand how it is that involuntary movements should be so near akin to paralysis, or absolute want of movement. This department is perhaps one of the most instructive in the whole range of disease. We may examine it a little more closely. Take a normal ganglion cell of the motor kind in the spinal cord. Contemplate its healthy mode of existence. It responds only to stimuli from a special part of the cortex of the brain or from a certain region of the body, with both of which it is in special relation. Increase its irritability, by any of the numerous means, to a considerable extent, and it will discharge its energy "spontaneously." A lesser grade of irritability will render it liable to be discharged on the slightest provocation. Of course this is an illustration of disease, yet how little it apparently differs from a state of health. Although the phenomenon of "irritable weakness" has long been recognised, yet we are inclined to think that it is still insufficiently acknowledged in practice. Actual diseases of the spinal cord afford abundant illustration of the principle. As an example we may consider the "knee-jerk." There are good grounds for believing that the disappearance of this phenomenon is always preceded by a state of exaggeration, transient no doubt in many instances. Weakness of the heart shows itself much more by an increase in the rate of its action, although one might *a priori* be disposed to think that its debility ought to be manifested in the display of less energy. Strange as it may seem, *a priori* thinking is not far wrong even here, if we do but define what is meant by strength. The strongest man, like the most powerful or healthy nerve cell, is to be gauged by the power of self-control and by the deliberateness of actions. The truly strong man about to perform an act effects his object with the expenditure of the least amount of force necessary under the circumstances. The heart, with its work to do, acts in the same economic manner as if it were in

a state of health. In febrile states it wastes its forces, acts more quickly, but with less efficiency. And yet this principle of irritability associated with weakness is not found under all circumstances. We have examples of progressive loss of strength without manifestations of increased action. If we attempt to look for uniformity of method in disease we shall be disappointed, or have to search deeply before we arrive at the uniformity of principle on which that nature presumably acts. An inquiry into the mechanism by which weakness goes hand in hand with increase of irritability will reveal that there are really two forces at least at work. In the case of the heart the motor nerve cells are under the control of other nerve centres, debility of which is probably the cause of the excessive number of discharges of the former. Probably a similar explanation holds good for the other examples of "irritable weakness," including most cases of mental derangement.—*Lancet.*

THE TREATMENT OF GONORRHŒA.

Those who have the largest experience in the treatment of gonorrhœa disclose the unsatisfactory condition of its therapeutics in the numerous and different plans which they adopt and recommend for its cure, in most of which a certain period of absolute rest seems to be essential. And every practitioner could doubtless testify regarding cases which have refused to get well in the orthodox way, and which have somehow been apparently cured by a druggist's or friend's perscription, while the patient continued to do the very things which his physician had charged him to avoid doing. The discovery of the so-called gonococcus led many to hope that at last the right plan of treatment was clearly indicated, and that the use of a germicide would be sure to effect a cure. Unfortunately in this, as in other connections, the germ theory has proved rather a speculative interest than of practical utility.

The fact remains that anti-bacterial injections cannot be said to be any more efficient in the treatment of gonorrhœa than others which have no such specific action; and their effect may be as fairly attributed to their influence in allaying the inflammation as to any action they may exert upon its supposed germ.

Nor are injections alone always satisfactory in the treatment of gonorrhœa, for which reason they often may, and sometimes must, be supplemented by internal medication; while sometimes peculiar circumstances make it impossible for injections to be used, and then internal medication must be the sole reliance. The importance of such medication cannot be doubted, and it is worth while to call attention to a recent study of the subject by Posner, in the *Deutsche medicinische Wochenscrift*, of August, 26, 1886.

Posner rightly regards gonorrhœa as a cyclic disorder, which, under favorable circumstances, tends to a spontaneous cure, and the requisite time for which may be shortened by judicious treatment. His own experience has led him to think well of the internal administration of the oil of sandalwood for this purpose, which, when he uses it from choice, he supplements with injections of resorcin toward the second or third week. The length of time required for a cure, he finds to be about three or four weeks. He has used internal medication alone in those cases in which all authors agree that injections are to be avoided, such as those in which the gonorrhœa has passed the barrier of the compressor urethræ, and has led to epididymitis, prostatitis, cystitis, or other complications.

The best form of administration of the oil of sandalwood is in the French capsules, containing each five drops; of which he thinks ten or twelve may be given daily. Posner has also given the oil combined with a little oil of peppermint, and Lublinski has ingeniously given it on peppermint drops with satisfactory results.

The use of pure oil of sandalwood is not new, nor are its merits underrated in this country. It is better borne by the stomach than is the oil of copaiba—which is more active—and it undoubtedly relieves tenesmus and strangury while exerting a beneficial influence upon the urethritis. No internal medication, however, can entirely supersede the use of injections, which should be employed whenever circumstances permit, and made of materials suited to the condition of each case. In the stage of acute inflammation the blandest and most soothing injections must be employed, and after this stage is passed there is probably nothing better than sulphate of zinc of the strength of two grains to the ounce of water.

An important point in the use of medicated injections is, not simply to have the urethra washed out by the patient's urine—as is usually prescribed—but to order that the urethra shall be several times syringed out with water as warm as can be comfortably borne. When this is systematically done, injections are most efficient. And when, with the proper use of injections, the administration of oil of sandalwood, or of copaiba is combined, we have what in the present state of our knowledge is the most satisfactory method of treating gonorrhœa.—*M. t. News.*

NECESSITY FOR PREPARATORY TREATMENT FOR CHILD-BED.

Dr. H. M. Cutts, says (*Am. Jour. Obstetrics*) "It is certainly of very common occurrence in private practice for the physician not to see his case until labor begins. Or he may have attended the woman in several previous easy confinements; but

that is no guarantee that the next parturition will not be a complicated one. The tendency among multipara is to struggle along to term, to attribute their bad feelings to their condition, and perhaps having experienced something similar before, to patiently await relief in child-birth. This comes, and with it, uremic convulsions, the woman having failed to notice the prodromal symptoms. Or an unusually large abdomen is considered as a case of twins or hydramnius. The doctor is much puzzled, never suspecting an ovarian tumor grown since his last attendance. On the other hand, the primipara, through modesty, or because she has no regular family physician in whom to confide, keeps her condition as long as possible a secret. She has, perhaps, treated herself to the best of her knowledge. If so, it is almost certain to have been irrational, rather through an exaggerated fear of what must not be done, than overdoing what might safely have been done. She enters upon her first labor in an anæmic state. Her veins are engorged with asphyxiated blood, and her whole system is loaded with fetal detritus—a condition wholly inadequate to obtain the rapid and complete involution of the uterus so necessary for her future comfort. The child also is endangered, and runs fully as much risk as its mother. Many children have been sacrificed by operative procedures consequent upon the necessity of rapid delivery in eclampsia. Many first children have been weak and sickly their whole lives long because their mothers failed to consult a physician before their birth."

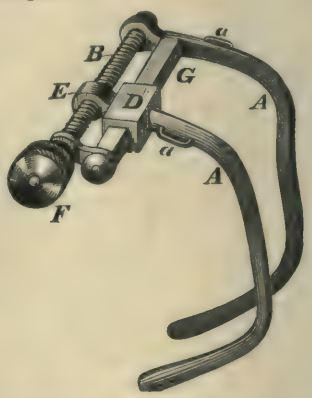
Further on the writer suggests, as guides for the practitioner, the following points to consider in connection with each case:

"1. The general health. Inherited and acquired disease. 2. The diseases due to pregnancy. 3. The shape of the pelvis. 4. The abdomen and vagina. The position, condition, and number of fœtuses." If the practitioner cannot have a supervision of the case during the whole period of pregnancy, the author says: "Much can be done in a *month* in building up the general health and alleviating concurrent affections. For this purpose one visit a week will usually be sufficient. Let one of the first calls be, by appointment, an evening call, and let the patient be in bed. If now the attendant make a careful measurement of the pelvis and examination of the vagina and abdomen, we are certain that much advantage will accrue to himself and the mother when labor begins"

The author concludes his paper with a reference to the objections which may be urged against the practice which he advocates, but thinks that the chief ones, which are: Extra labor and expense, together with ignorance on the part of the mother, may gradually be overcome and the custom established. The profession, he thinks, ought to advise against early marriage. During the period of pregnancy the urine should be examined for albumen, the presence of which has some connection with the development of eclampsia, as well as attacks of cerebral and pulmonary apoplexy, acute mania, paraplegia and affections of the eye and ear. Measurements of the pelvis are of great importance, and it is renewedly urged that one of the most potent ways of reducing the rate of child-bed mortality is by the "proper preparatory treatment for the tremendous strain of labor."

A NEW TRACHEOTOMY DILATOR.

Dr. Briggs, of St. Louis, has invented an instrument for use in tracheotomy, which is deserving of more than a passing notice. Surgeons who perform frequent tracheotomy operations have long felt the need of some practical substitute for the different forms of tubes which have heretofore been used. An instrument which could be more easily introduced, and that would retain itself in the trachea, one that would require less watchfulness and care on the part of the attendants, and was not liable to become clogged by the mucous or false membrane, and that did not of itself cover so much of the wound, and above all, something which would admit of dilation of the lesion if such became necessary. The Dilator is provided with loops (a, a) for the insertion of tapes to keep same in its place, but as the instrument is self-retaining by the form of the blades it will be rarely necessary to use the tapes.



The instrument as shown in above cut, consists of two narrow blades (A. A) of solid steel, curved as shown in the engraving and convex on the outer sides, the inner side of each blade being made flat, (so that they may approach each other more nearly when closed,) one of these blades, the left, is stationary, while the other slides by means of box D, upon the bar G receiving its motion from the screw B, through the screw nut E; the screw is provided with a milled head which renders the adjustment of the blades a rapid and easy operation. It is inserted and used as follows: The blades of the instrument should be screwed up in close contact to each other

before the operation is commenced. After the trachea has been reached and the incision made into it, the knife should be retained within the trachea, and the blades of the Dilator inserted by slipping them in alongside of the blade of the cutting instrument, which thus acts as a director for them. This done, the knife may be withdrawn and the blades of the Dilator separated to a proper distance. Should the wound become clogged at any time, the blades may be farther separated, which will dilate the trachea and cause the obstructing material to be coughed out, or, it may be removed by the forceps or other suitable instrument.

RESORCIN.

The *Centralblatt fur die ges. Therapie*, contains the following observations concerning resorcin by M. Ihle, of Leipsig, reported by Jarisch. The specific antiseptic properties of resorcin can be best noticed in herpes tonsurans. After two or three applications of a strong resorcin ointment the inflammation is allayed, and if the plates of epidermis tanned by the resorcin are removed, it will be found that only in those hairy regions where the spores have made their way to the bottom of the hair follicles is it necessary to continue treatment.

A very great advantage in the treatment of parasitic sycosis with resorcin is that the beard need not be epilated, the hairs loosening of themselves under the treatment. The pastes used should be applied two or three times a week, thickly with a brush, and rubbed well into the parts, which are then to be covered with cotton. It is at all times well for the physician to apply the preparation himself, and increase the strength with the progress of the cure. For instance, if the first application is a 10 per cent. paste and causes no great irritation, the next may be of 25 per cent. and the strength may be thus gradually increased to 50 or 80 per cent., then when the pus formation and irritation begin to decrease, applications must be continued in decreasing strength, following a similar scale.

As spores may still exist in a case of apparent cure, it is advised to give the patient a 3 per cent. salve to apply at first daily, and later on, once or twice a week. Now, for the first, should shaving be permitted, because in the energetic treatment with resorcin, shaving should be absolutely forbidden on account of the irritation which it causes.

The following ointments are recommended :

℞ Resorcin purissim. 10
Vaselini albi 50
Amyl Oryzæ,
Zinci Oxidi . . . . . aa 25
M. ft. past.

With an increase in the amount of resorcin, it is necessary to decrease proportionately the zinc and starch. Therefore for stronger ointments, the following is used :

℞ Resorcin puriss. 50
Vaselin. albi 60
Zinci Oxid.,
Amyl. Oryzæ . . . . . aa 20
M. ft. past.

The author speaks of resorcin in the treatment of pityriasis vesicolor and eczema marginatum as being attended with absolutely sure results. He also recommends it in the treatment of alopecia areata and seborrhœa cum defluvio capillorum.

For these he uses :

℞ Resorcin puriss. 5.10
Ol. Ricini . . . . . 45.
Alcohol . . . . . 150.
Bals. Peruv. 0.5
M. S. Apply daily to head with a flannel rag.

The itching of the seborrhœa is said to cease entirely under this treatment. Condylomata acuminata treated with an eighty per cent. resorcin salve, daily applied, quickly disappear. It is well to apply a five to ten per cent. salve for some time afterward to remove the tendency to their redevelopment. Dr. Ihle does not approve of the application of resorcin to eczema and other inflammatory skin diseases, because of its irritating properties. Dr. Unna, however, in a pamphlet upon Ichthyol and Resorcin (Hamburg and Leipsig, 1886), recommends a five to ten per cent. ointment in the treatment of seborrhœic eczema resulting from alopecia areata, and prefers it to ichthyol or pyrogallic acid.

He mentions as a special advantage its lack of color and freedom from staining. In psoriasis its action is not so favorable, but for all dry, scaly eczemas of the face he recommends it. On account of the difficulties of diagnosis in skin diseases of the face, he advises that the drug be discontinued the moment it is noticed that no improvement is taking place. In scars or pitting from variola, traumatism, acne, or other cause, and in false keloid he has found it of benefit, but its advantages over ichthyol and other reducing substances lies wholly in the fact that it does not produce discoloration and does not inflame the eyes as does chrysarobin, although under certain circumstances the latter drugs have preference. Dr. Unna declares himself quite convinced that in acute exanthema, and especially in scarlatina and variola, resorcin is destined to play a very important part.

In chronic skin diseases its use must remain limited to external application.—*Journal of Cutaneous and Venereal Diseases.*

THE DIETETICS OF PULMONARY PHTHISIS.—Dr. Loomis *(Jour. of Reconstructives)* gives the following rules for the dietetic treatment of phthisi-

cal patients: 1. Every phthisical patient should take food not less than six times in the twenty-four hours. The three full meals may be at intervals of six hours, with light lunches between. 2. No more food should be taken at any one time than can be digested easily and fully in the time allowed. 3. Food should never be taken when the patient is suffering from bodily fatigue, mental worry, or nervous excitement. For this reason mid-day naps should be taken before, not after, eating. Twenty to thirty minutes' rest in the recumbent posture, even if sleep is not obtained, will often prove of more value as an adjuvant to digestion than pharmaceutical preparations. 4. So far as possible each meal should consist of such articles as require about the same time for digestion, or, better still, of a single article. 5. Within reasonable limits the articles of any one meal should be such as are digested in either the stomach or intestine alone, *i.e.*, the fats, starches, and sugars should not be mixed with the albuminoids, and the meals should alternate in this respect. 6. In the earlier stages the amount of fluid taken with the meals should be small, and later the use of some solid food is to be continued as long as possible. 7. When the presence of food in the stomach excites cough, or when paroxysms of coughing have induced vomiting, the ingestion of food must be delayed until the cough ceases, or an appropriate sedative may be employed. In those extreme cases where every attempt at eating excites nausea, vomiting, and spasmodic cough, excellent results are attained by artificial feeding through the soft-rubber stomach-tube. 8. So long as the strength will permit assimilation and excretion must be stimulated by systematic exercise, and when this is no longer possible the nutritive processes may be materially assisted by passive exercise at regular intervals. The following may serve as a sample menu for a day in the earlier stage. The meat soup is made by digesting finely chopped beef (1 lb.) in water (O j.) and hydrochloric acid (m 5) and straining through cheese cloth. Menu: On waking, one-half pint equal parts hot milk and Vichy, taken at intervals through half an hour. 8 A.M., Oat-meal with abundance of cream, little sugar; rare steak or loin chops with fat, cream potatoes; soft-boiled eggs, cream toast; small cup of coffee, two glasses of milk. 9 A.M., Half-ounce cod-liver oil, or one ounce peptonized cod-liver oil and milk. 10 A.M., Half-pint raw meat soup; thin slice stale bread. 11-12, Sleep. 12.30 P.M., Some white fish; very little rice; broiled or stewed chicken; cauliflower; stale bread and plenty of butter; baked apples and cream; milk, komyss, or Matzoon, 2 glasses. 2 P.M., Half-ounce cod-liver oil, or one ounce peptonized cod-liver oil and milk. 4 P.M., Bottle kumyss, or Matzoon; raw scraped beef-sandwich. 5.30-6 P.M., Rest or sleep. 6 P.M., Some thick meat or fish soup; rare roast beef or mutton; spinach; slice stale bread; custard pudding; ice-cream. 8 P.M., Half-ounce cod-liver oil, or one ounce peptonized cod-liver oil and milk. 9-10 P.M., Pint iced milk; cup meat soup. 1-2 A.M., Glass milk, if awake.

Professional Responsibilities.—One of the most difficult part of a physician's duties, and one which demands all the tact and judgment he can bring to bear, consists in determining the course to pursue when certain diagnoses have been arrived at. A woman who believes herself to be suffering from some trifling and passing ailment, is shown to be the subject of carcinoma; a patient with a supposed simple sore on his lip has epithelioma; or a person apparently in good health is found, on examination, to be the possessor of some form of cardiac disease, not only unsuspected, but, it may be unfelt. The physicians of "chest-hospitals" know as well as any the difficulty of deciding whether to reveal the true nature of the case, or to leave the patient in a state of ignorance, which, after all, is comparative bliss.

Of course, the plan adopted is modified according to circumstances. Affections such as epithelioma, where surgical intervention is imperative, are naturally explained without reticence; for the more fully the patient understands his position, the more disposed will he be to acquiesce in the necessary remedial measures. The real difficulty lies in those cases, such as cancer or heart-disease, where little or nothing may be practicable for their relief, but where a fatal termination is either inevitable or to be feared.

In the discussion at the Brighton meeting on the duration of life with heart-disease, Dr. Bristowe made some very excellent and apposite observations on this subject. "It is," he said, "quite early enough, in my opinion, for a man to know that he has heart disease when he begins to feel the effects of it;" and with this sententious remark most practitioners will agree. Incalculable harm has often been done by the abrupt announcement that a patient has cancer, or that another has heart-disease; and the evil is aggravated by the fact that, as in all other human affairs, the diagnosis may be wrong, or the prognosis may not be realized. Sir Andrew Clark told a very amusing but instructive anecdote of his having been called to see a gentleman suffering from bronchitis, who, fifty years before, had been precipitately superannuated on full salary, on the announcement by the medical officer to an insurance company that he was the victim of an incurable form of heart disease, and would probably not live more than six months.

Dr. Bristowe, in expressing the belief, backed by the hope, of his own freedom from "murmurs," sturdily declared that nothing short of acute and pressing circumstances would induce him to give

any of his colleagues the opportunity of disturbing his equanamity by such an announcement.

The best plan to pursue in such cases is undoubtedly to discharge the responsibility of the knowledge so obtained on to the shoulders of a near and trustworthy relation or friend. Simple silence is apt to lead subsequently to the imputation of ignorance; and, for the sakes of both the practitioner and the patient, it is desirable that cognisance should be taken of the actual condition of the latter, even when no immediate bad results are to be anticipated.—*Brit. Med. Jour.*

Congenital Hereditary Atonic Dyspepsia.—During a practice of twenty years, I have prescribed Lactopeptine to patients of all ages, and have never been disappointed in its action when indicated. But I desire to speak in particular of its action in a case of congenital hereditary atonic dyspepsia: in an infant, to whom I began to administer this remedy on the third day after birth. Mrs. H. L. S., Langside, Miss., was delivered of a male child in whom there was manifested well marked symptoms of atonic dyspepsia. The mother had been a victim of dyspepsia from girlhood, and had inherited the malady from her mother.

The infant was put to the breast a few hours after birth, and nursed readily; but almost immediately rejected the milk. Repeated trials all resulted in vomiting, followed by sxhaustion. Other articles of food were tried, including cow's milk, etc., without improvement. The child was in great danger of starvation. On the third day, I began the administration of Lactopeptine. The effect was immediate and almost miraculous. I ordered one-sixteenth of the adult dose to be dissolved in about two ounces of breast milk (drawn from a robust, healthy wet-nurse) and administered every two and a half hours. There was no more rejection of milk—except the usual vomiting of curdled milk, to relieve the crowded state of the stomach, which occurred occasionally, after the first ten days. Condensed milk, cow's milk (properly diluted and sweetened), boiled bread (pap), were, after a while, substituted for breast milk, but always with Lactopeptine. A steady improvement was manifest from the beginning, and kept up during the first dentition, which process was gone through with in a most satisfactory manner. No untoward diarrhœa or intestinal disturbance characterized this period, and, at ten months the child was virtually cured of its dyspepsia, and could eat and digest ordinary food such as children of that age may do in good health. The parents of the child believe firmly (as I do) that Lactopeptine saved their infant.

In cholera infantum, in diarrhœa, and in all of the disturbances of the alimentary canal, during dentition and early infant life, I find Lactopeptine an ever-effective and reliable remedy. In adult dyspepsia, all are now familiar with its beneficial effects: but I should be glad if the profession would be induced to try it in the vomitings, diarrhœas and dyspepsias of infancy. I recall several babies whose lives I believe I could have saved, had I known, ten years ago, what I do now of the ready adaptability of Lactopeptine to infants ailments.—R. W. Beers, M.D., *Medical Brief.*

Posology and Use of Some New Remedies.—*Osmic acid:* Best administered in pill form (made up with Armenian bole). The dose is $\frac{1}{60}$ grain, which may be repeated several times a day. Used in epilepsy and sciatica. *Agaricine:* Best administered in combination with Dover's powder. Dose $\frac{1}{12}$ to $\frac{1}{6}$ grain. Used for night-sweats. *Aloin:* From $\frac{1}{8}$ of a grain to $3\frac{1}{2}$ grains, in pill form. *Antipyrine:* Dose from 75 to 90 grains, divided into three portions, one of which is to be taken every hour. *Bismuth salicylate:* Dose from 5 to 7 grains, in pill form. In typhoid this dose may be doubled and repeated every hour, up to 10 or 12 times. *Canabinone:* From $\frac{2}{3}$ to $1\frac{1}{2}$ grain. Best administered mixed with finely ground roasted coffee. Sedative and hynpotic. *Colocynthin:* Used subcutaneously. The dose is from $\frac{1}{6}$ to $\frac{1}{2}$ grain. It may also be administered in pill form, by the mouth, the requisite dose being from $\frac{1}{2}$ to 1 grain. *Concallaramine:* Internally, in pill form. The dose is from $\frac{3}{4}$ to $1\frac{1}{2}$ grain. *Eugenyuin:* Best given in pill form, combined with extract of belladonna or of hyoscyamus. The dose is from 3 to 10 grains. *Nitroglycerin* is best given in alcoholic solution. The dose is from $\frac{1}{120}$ to $\frac{1}{60}$ grain, repeated several times a day. Rossbach prefers ether as a solvent. His formula for its use is as follows: Dissolve $1\frac{1}{2}$ grains of nitroglycerin in sufficient ether, and add the solution to a mixture consisting of two ounces of powdered chocolate and one ounce of powdered gum-arabic. Mix very thoroughly and divide into 200 pastilles. Each pastille will thus c ntain $\frac{1}{133}$ grain of nitroglycerin. Used in angina pectoris, and as a diuretic. *Picrotoxine:* In aqueous solution. Dose from $\frac{1}{8}$ to $\frac{1}{6}$ grain. Used in epilepsy. *Sulphate of thalline* may be given dissolved in wine or water (with some corrigerant). The dose is from 4 to 8 grains, or 1 grain every hour. The above is taken in part from the *Rundschau Leitmeritz.*

Treatment of Chronic Ulcers.—Dr. A. Heidenhain, of Coeslin, has arrived at the conclusion that by far the best method of dealing with old chronic ulcers, especially of the leg, is to dress them with a considerable thickness of absorbent cotton. Volkman has long since practised this method, which, we believe, was original with Guerin, the French surgeon. The absorbent cotton is pressed upon the ulcer by a roller bandage, and is allowed to remain undisturbed until, after the

lapse of five days or a week, the secretions come through. Then it will be found that delicate healthy granulations have sprung up in place of the dirty necrotic appearance erstwhile presented, and the torpid callous margins are considerably improved in appearance. The dressing is then re-applied and changed as before. The advantage of this method lies in its being absolutely painless. No septic infection need be feared from absorption of pus. The dressing remains sweet until it is so saturated that the discharge comes through, when a change should at once be made. By actual experiment, the superiority of this dressing over the method of compression by adhesive plaster strips has been demonstrated.

After the cotton dressings are no longer needed, the surface may be dressed with zinc ointment, after irrigation with carbolic acid ; if more stimulation is desired, a 2½ per cent. iodoform ointment answers admirably. Grafting should be employed if the ulcer is of great extent.

In order that the new formed skin does not crack and break, when the limb is again put to active use, it is advisable to oblige your patients to take some exercise during the process of repair. The ulcer does not heal so quickly as if absolute rest be observed, but the result is a more permanent one. In such cases that are obliged to be a-bed on account of the large size of the ulcer, Heidenhain has found it of great advantage to bandage the limbs in a flexed position. Thus the skin and the soft parts are kept at a certain tension during the healing process. If the limb be kept at rest fully extended, the cicatrix will surely tear open when walking is resumed. To keep the leg flexed, the use of a double inclined plane is very serviceable.—*Weekly Med. Rev.*

THE FORMING OF FENESTRA IN PLASTER-OF-PARIS BANDAGES FOR COMPOUND FRACTURES.—The following method of setting a compound fracture and making the fenestra can invariably be brought into play with the greatest success :

The bones of the fractured limb being properly approximated, and the limb itself extended and held by the assistants, the wound is first thoroughly cleaned and the limb lightly oiled. We then take a common, clean cylindrical glass bottle, with a concave bottom, the diameter of its base being equal to the diameter of the fenestra we wish to form. The base of this bottle is next completely filled with a wad of absorbent cotton, and applied over the wound. This must be done by an assistant, and in such a manner that the centre of the base of the bottle and the wound are, as nearly as possible, opposite each other. The bottle is to be held in this position during the complete operation of applying the bandage.

The next step consists in enveloping the limb in a layer of absorbent cotton, carefully passing round the bottle when we come to it. This is held in place by the application of a *wet* three-inch roller bandage, which in turn *surrounds* the bottle when reached. In the usual manner we then apply the plaster bandages, surrounding the bottle as before in the case of the other layers of the dressing.

A few moments are sufficient to allow us to trim down such plaster as has accumulated about the bottle to a level with the outer surface of the splint. This can best be done with a good strong knife-blade. The bottle can now be slightly turned and easily withdrawn, leaving, as it always does, the circular piece of antiseptic cotton covering the wound. With our knife we now nicely round off the edges of the fenestra before removing the cotton from over the wound, as it protects the latter from the *débris* of this part of the operation,

Finally, the cotton itself is carefully removed. and we see that it has taken up such discharges from the wound as have occurred during the application of the bandage, and we have before us as a result not only our bandage safely on, but a fenestra with cleanly rounded edges, with its exact centre occupied by the wound.—*New York Med. Jour.*

TUBERCULOSIS COMMUNICATED BY FOWLS.—Dr. G. de Lamallerée relates fully and convincingly an important case of this kind which occurred in a small hamlet with specially good hygienic surroundings, and where disease was practically unknown. A young soldier died here of phthisis which he had contracted while on active service. His wife, who nursed him assiduously and never left the room in which her husband was, showed signs of phthisis soon after his death, and the disease advanced rapidly. A neighbor who had little intercourse with her also developed signs of phthisis which the author was entirely at a loss to account for at first, as she had previously been a strong, robust woman. He discovered that a number of the fowls had died, and that they had been eaten by this woman in an under-cooked state. He further noted that when the first female patient coughed, it was the signal for all the hens about to approach where she was, in anticipation of getting the sputa to peck. He made a *post mortem* examination on one of the fowls which died soon after his attention had been drawn to the facts, and he found extensive turbercular changes in the intestines and other organs, the parts containing the bacillus tuberculosis. He insists upon this being a case in which infection was conveyed, (1) from man to man ; (2) from man to animal ; (3) from animal to man ; and the case as recorded appears to us to be satisfactorily proved.—*Gazette Méd. de Paris.*

TREATMENT OF SCARLET FEVER AND DIPHTHERIA.

—Dr. C. R. Illingworth (Accrington) writes:—I find that the biniodide of mercury is a specific and prophylactic for scarlet fever and for diphtheria. Both are diseases due to the development of germs in the blood, myriads of minute nucleated bodies in active movement being visible by the microscope on examination of the membrane peculiar to each. Hence, I think, the efficacy of the remedy I name. As all diseases of this nature deprive the blood of a large portion of its hæmoglobin and fibrin, I prescribe the ammonio-citrate of iron with it. Thus: ℞ Sol. hydrarg. bichlor. ʒiii; potass. iodid. gr. x; ferri ammonio-citrat. gr. xx; syrupi ℥ss; aquam ad ʒij. Fiat mistura. Sigma: One teaspoonful for every two hours (for a child of from 2 to 4 years). As soon as all the membranous deposit has disappeared from the parts affected, I give the usual steel and chlorate of potash mixture. As a rule, this occurs in from four to five days; but in severe cases it takes ten. The only and important exception to this rule of treatment, is in those cases where the disease is ushered in with vomiting and purging, with scanty rash and collapse. In these which evidence a rapid liquefaction of the blood by the action of the poison, the iron and chlorate of potash mixture should be given at once in full doses, every two hours. Locally, I have found nothing to act better than the glycerine of tannic acid.

Memorizing Doses.—Dr. G. A. Wiggins of Philadelphia (*Med. World*, Aug., 1886), gives some general rules with their exceptions, which are thoroughly reliable.

1. The dose of all infusions is 1 to 2 ozs., except infusion of digitalis, which is 2 to 4 drs.

2. Dose of all poisonous tinctures is 5 to 20 minims, except tincture of aconite, which is 1 to 5.

3. Dose of all wines is from ½ to 1 fl. dr., except wine of opium, which is 5 to 15 minims.

4. Of all poisonous solid extracts you can give ½ gr., except extract of calabar bean, which is $\frac{1}{16}$ to ¼ gr.

5. Dose of all dilute acids is from 5 to 20 minims, except dilute hydrocyanic acid which is 2 to 8 minims.

6. Dose of all aqæ is from 1 to 2 ozs., except aqua lauro cerasus and aqua ammonia, which are 10 to 30 minims.

7. Of all syrups you can give 1 drachm.

8. Dose of all mixtures is from ½ to 1 fl. oz.

9. Dose of all spirits is from ½ to 1 fl. dr.

10. Dose of all essential oils is from 1 to 5 minims.

Potassium Permanganate in Burns and Frost-bites.—Dr. A. A. Züboff writes in a Russian journal that, having tried potassium permanganate in upward of sixty cases of burns and frost-bites, he has arrived at the following conclusions: 1. Permanganate of potash, in the shape of frequently changed compresses (linen or hygroscopic cotton-wool soaked in a solution of one or two grains to an ounce of water), is an effective remedy for frost-bite of the first and second degree. 2. The same lotion acts as successfully in burns of the first degree. 3. It is less successful in burns of the second degree. At all events, the permanganate lotion rapidly relieves inflammation around blisters, and pain, and prevents suppuration when blisters remain intact. In this category of cases it is advisable to employ a weaker solution (half a grain, or even less, to an ounce). Two cases are given in detail. One of the patients received (when taking a vapor-bath) a scald of the first degree, extending from the breasts to the inguinal folds anteriorly, and between the same levels posteriorly. Pain disappeared within an hour after the application of the permanganate lotion. Soon the epidermis began to peel off. She was cured within eleven days. Another woman had a similar scald of the face and a hand. She also obtained rapid relief, the treatment lasting a week. —*Lond. Med. Rec.*

Grey-Powder a Specific in Infantile Cholera.—There is no greater certainty in therapeutics than that "infantile cholera"—profuse and watery diarrhœa—will be cured if treated within the first few hours by one-sixth of a grain of grey-powder given hourly even by itself. But I give usually one-sixth of a grain of hydragyrum cum cretâ, with two grains of lactopeptine; and in some cases I administer as another *adjuvans* a vegetable astringent, such as krameria. Again, when the stools are slimy with, it may be, blood streaks, I give liquor hydrargyri perchloridi, 2½ drachms in two ounces of water, of which a teaspoonful given every hour meets the case.

The diet should be cold, consisting of arrowroot made with water, and very slightly sweetened; barley or rice water to drink. One case which was baffling the grey-powder was explained by the presence of a piece of undigested beef on a napkin. Maternal ideas of feeding have sometimes to be sharply enlightened. — Dr. MacDonald in *Brit. Med. Jour.*

Bromide in Diphtheria.—Senor Lovat A. Mulcachy, of Buenos Ayres, finds great advantage in cases of diphtheria in giving a solution of bromine. The bromine is simply dissolved in water in the proportion of 1 to 2500. A teaspoonful of this is given every ten minutes. He says that children will swallow it automatically even when asleep. For infants under three years of age the strength may be diminished to half that mentioned above. He cites several cases showing the successful results obtained by this method, but he

points out the importance of the administration being continued for some days, and of the medicine being given exactly every ten minutes. As to local caustic applications, he considers that they serve no purpose whatever, but only irritate and distress the patient.—*Lancet.*

The Subcutaneous use of Ergotinine in Diabetes and Albuminuria.—A. Dehenne claims to demonstrate—

(1) The ergotine, or ergotinine, subcutaneously, will cause the temporary and often the permanent disappearance of the glycosuria, polydypsia, polyuria, emaciation, and weakness of diabetes.

(2) That these symptoms disappear in a regular order; the polyuria and polydypsia disappear after 5-8 injections, and glycosuria lessens after the second or third injection, and disappears after the tenth or twelfth.

(3) That the glycosuria reappears if the treatment be stopped too suddenly.

(4) That the disappearance is permanent after six or eight weeks of treatment.

(5) That the injections are entirely harmless.

(6) That by this treatment diabetics can be prepared for any surgical operation, particularly cataract.

(7) The freedom of this treatment from digestive disturbances.

He injects six to ten drops, sometimes more, daily.—*L'Union Médicale.*

Tuberculosis of the Lungs is frequently modified in its most harassing symptoms by inhalation of a spray of bichloride of mercury. A convenient formula is the following:

℞	Hydrarg. bichlor.,	gr. ii.
	Aq. destill.,	℥ j.
	Sodii chloridi,	ʒj.

M. ft. sol,

In *Progress* we read of a pronounced case treated by this spray; the patient also took a pill containing 1-40 gr. of the bichloride before each meal and, at night and at the same time a pill composed of asafœtida, gr. iii, and ext. nux. vom. gr. ¼ for six weeks. The result was a most happy one.

We do not find any statement respecting syphilis in the case. If such existed, the efficacy of the bichloride would have a significance entirely different from the one intended to be conveyed.—*Weekly Med. Rev.*

How to Administer Cod-liver Oil to Infants.—A good suggestion has been made by Yeldham, of a plan of administering cod-liver oil to infants. Let the nurse dip the end of her little finger in the oil, and put it into the child's mouth. This may be repeated five or six times in the twenty-four hours. In such small quantities, not only does it never disagree, but the child sucks it off the finger with avidity and evident pleasure. It may be administered in this way to the youngest infant. By this simple and inexpensive expedient Dr. Yeldham says many infants who were absolutely starving for natural foods became fat and plump, and happily in an almost incredibly short space of time. The oil has the effect of enabling the child to digest other food, which it could not retain on its stomach without it.

Morphine in Post-partum Hemorrhoids.—Dr. M. S. McMahan writes to the *N. Y. Med. and Surg. Jour.* that he has successfully used the following plan in post-partum hemorrhage for the last fifteen years: On finding the surface of the patient pale, the extremities cold, with profuse hemorrhage, he at once injects hypodermatically from ten to fifteen minims of Magendie's solution of sulphate of morphine. This will invariably, and within a few minutes, produce a flushed surface, warm extremities, and a stopped or much diminished flow. He adopts no other means—no styptics, no cold compresses, and no foolish plugging.

The Function of the Tonsils.—Dr. R. Hingston Fox, in an interesting article on the Functions of the Tonsils, in the twentieth volume of the *Journal of Anatomy and Physiology*, expresses the opinion that these glands belong to the digestive and not the respiratory tract, and that there function is to reabsorb certain constituents of the saliva in the intervals of meals which would otherwise be wasted. He thinks that the view of their having an absorbing function is further supported by the strong evidence of the power of the tonsils to absorb morbid poisons directly from the saliva.—*Lancet*

"Educate a Woman and you Educate a Race."—This is a saying full of promise if it be rightly interpreted, full of dire disasters if applied to the mind to the exclusion of the body. While it may be true that too much bodily labor may render women less prolific, it is very much more clearly shown that excessive mental labor is a cause of sterility (or infertility). "In its full sense," says Mr. Herbert Spencer, "the reproductive power means the power to bear a well-developed infant, and to supply that infant with the natural food for the natural period. Most of the flat-chested girls who survive their high-pressure education are unable to do this."

A Cause and a Cure of Clergymen's Sore Throat.—Mr. Thomas Whipham (*The Lancet*) thinks that many cases of clergymen's sore throat, are due to the practice by this class of hanging down the head while preaching, or reading in service. Cases are cited in which speedy relief was obtained by the patient's holding the head erect in speaking.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet, Toronto."*

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, DECEMBER, 1886.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

LAPAROTOMY EPIDEMIC.

An epidemic of abdominal section including intra-peritoneal excision of various organs, has supervened, among gynæcologists especially, which promises to assume gigantic proportions, and unless restricted by some means to its legitimate boundaries, may promote more evils than it is destined to cure.

Our medical journals are crowded with reports of hysterotomy, salpingotomy, öophorectomy, etc., etc., in number and extent somewhat appalling. The rapidity of growth of this new surgical specialty is wonderful. If this amazing excess of growth continues long, no small proportion of the female sex, will be spared the pains and troubles incident to the propagation of the species—and probably the pleasures as well. Gynæcology has become the one prominent specialty of the age. Were laparotomy operations restricted to men of extensive experience, furnished with all the requirements which both art and science can command, with the very best sanitary environment, unbiassed by hobbyism, and free from too zealous ambition to become celebrated as brilliant operators and to add to their record; then spaying women might be justified. But when every physician, tempted by the prevailing fashion to assume the title of gynæcologist, and ambitious to become a Lawson Tait, is encouraged, and to no small extent authorized by precedent, to spay every woman coming under his control, who he is anxious to persuade himself, has one or more of the various uterine, tubal, or ovarian organic diseases; then this epidemic becomes serious, and the interests of society demand that some restrictions be placed upon this modern mental craze, which will restrain it within reasonable bounds.

We have in the past observed the excision epidemic, the antiseptic revolution, the iridectomy mania, and many other temporary tidal waves of fashion, sweep over the professional judgment, and overwhelm many of even our most competent men But none of these were fraught with one half the evils of this latter-day outburst, to poor suffering female humanity. These fashionable epidemics react upon the profession, and lay it open to the charge by the laity of incapability to form well-balanced, calm, and thoughtful judgments on matters wholly pertaining to us.

The hospital for women in Liverpool during the year 1885 had but 347 in patients among whom there were 111 cases of abdominal section, 96 total removals and 15 partial removals of the uterine appendages. Such wholesale castration is, to say the least, surprising, and puts no little strain on our belief in the necessity for, and our confidence in the unbiassed judgment of the gynæcologists, operating on more than one-third of their hospital patients. Such a startling record could not pass unnoticed even by the laity, and numerous attacks on the management of this hospital were made by the daily papers. The result was that a committee of hospital managers, was appointed, who found it necessary, in view of the recent expressions of opinion on the subject, to pass a very drastic resolution prohibiting abdominal section in that hospital, pending the completion of the report, which was being undertaken by the Liverpool Medical Institution.

The following letter to the Secretary of the Hospital for Women Liverpool, from Sir T. Spencer Wells, written in Sept., 1886, speaks for itself:

DEAR SIR,—Your letter of the 24th inst. has been forwarded to me here. In reply I feel bound to say, that as the total number of in-patients in the hospital in 1885 was only 347, the statement that of these 111 (or nearly one-third) were subjected to abdominal section is so shocking as to be almost incredible. If it is correct, in my opinion a most complete and searching inquiry should be made into the details of the case of every woman operated upon; the reason why the operation was performed; whether it was done after full explanation of the danger, and of the necessary results to the patient and her husband; and

what has been gained or lost by each woman who has survived the operation.

I am dear sir, yours truly,
T. Spencer Wells.

This is doubtless an extreme case, but the various hospitals in Germany, France, Italy, in brief all over Europe as well as America, are more or less closely following the example of the Liverpool hospital for women. Private operators are doubtless adding their quota daily to the already too numerous host of female eunuchs. As a remedial measure no very satisfactory results have been published. No doubt a large majority recover from the operation *per se*, although many fatal results, direct and indirect, have occurred from this cause. But beyond immediate results very little has come before us. It is of the utmost importance that the ultimate therapeutical value of laparotomy should be clearly established, prior to its general acceptance by the profession, thus preventing the abuse of so serious an operation. Another important consideration is its subsequent effects physically and mentally. A series of senile changes set in after the natural menopause Is it not therefore probable that similar results will follow the artificial menopause, in consequence of which the unfortunate woman will become prematurely aged. Again the loss of sexual power, to the young woman at least, should not be overlooked. The influence of ovariotomy on the mental as well as the physical powers, should receive consideration from those gynæcologists who advocate so radical a measure for so many ills to which the female is heir. If we may judge from analogy (in the lower animals its influence is very marked) we would naturally anticipate deterioration of the physical powers at least.

That important improvements have been made in gynæcological practice within the memory of most physicians is freely admitted. And that the general practitioner is now much better able to cope with, and relieve many female maladies in consequence of the advance made by gynæcologists is not disputed. But is their not some danger of reaction occurring from the evident abuse of laparotomy, similar to what has followed many other important remedial agents? Is there not even now a tendency to diagnose many obscure maladies in the female pelvis as catarrho-salpinx, hemato-salpinx, hydro-salpinx, pyo-salpinx, salpingitis, cystic ovary, etc., etc., upon very insufficient evidence, and even to resort to abdominal section to assist in diagnosing some intra-peritoneal malady, which could, doubtless, in many cases have been relieved or cured without so dangerous an examination. This cannot fail to bring laparotomy into disrepute, and ultimately result in its being opposed or prohibited where it is essentially necessary.

Instances are not wanting where operations were advised and pronounced imperative by celebrated laparotomists for the removal of the ovaries, which were not permitted by the ladies most interested who have recovered from the various alleged otherwise incurable maladies, and subsequently became mothers. We are not aware that Canada has suffered to any great extent from this epidemic, but as it is very prevalent not only in Europe, but in the neighbouring Republic we are liable to be attacked, and it may become virulent here as well as in other places. Notes of warning are being sounded in those countries where it prevails. Gynæcologists themselves are becoming alarmed, and in their congresses are now expressing some fears that it is being carried too far, and mildly deprecating its abuse. It is therefore necessary that we quarantine this epidemic, if not already too late, until all danger of contagion has passed.

HEREDITY IN CONSUMPTION.

As the march of scientific progress goes on, many old ideas and landmarks are being swept away, or so modified as to be scarcely recognizable. No fact has been more universally recognized by both the profession and the laity, than that consumption is hereditary. But the bacillus tuberculosis, as it is now known, materially changes our conceptions of this disease. It is almost universally admitted that this micro-organism is distinctly causative of the tubercular nodule, though the full chain of evidence cannot be said to be complete. Many observers have made careful investigations as to the possibility of transmission of the bacillus to the fetus, whether from the male or female parent. Dr. Jani has concluded that the fetus *may* be infected in two ways, viz.: through the semen of the male or through the migration of the bacilli from the abdomen of a tuberculous mother to the womb, though he believes that infection through the placental circulation must be unusual, for on the examination of a fetus of five

months, the mother having died at that term, of general tuberculosis, it showed no signs of infection either in its lungs, kidneys, liver, or the epiphysial ends of its bones. Professor Wolff, has also made a large number of observations, by inoculating gravid animals with anthrax bacilli and with vaccine, and in no case did either poison show itself in the fetus. The results of his inoculations of the tubercle bacillus are not yet known in full, but so far as is known they point in a direction quite opposite to the theory so strongly insisted upon by Koubasoff, that after inoculation, the bodies of the fetuses showed bacilli in large numbers. While Wolff does not deny that tuberculosis may be hereditary, he insists that such transmission must be of *extreme infrequence*. Why then do the offspring of consumptive parents so frequently die of consumption that it has come to be regarded as a rule of nature that they shall so die. If the bacillus be applied to an open wound, infection rarely takes place. Most practitioners must have received, times without number, the infection of consumption into their lungs, and into wounds on their hands; but how few contract the disease, without having the hereditary taint. The life history of this particular organism may have something to do with this result. It is a slowly developed organism, requiring about ten days when cultivated artificially before it begins to grow. Now if applied to an open wound it will almost certainly have been removed by washing, etc., before it has time to establish itself. But if injected under the skin, at first local tuberculosis developes itself, to be followed later, by a general infection. So in the case of the lungs. When a healthy individual inspires the materies morbi, it is removed by expectoration, before it has time to establish itself and grow. But when a portion of the lung remains consolidated for a length of time, as after a catarrhal pneumonia, then the tubercle bacillus finds a suitable nidus, and time to grow, and foci of infection are thus established. In fibrinous pneumonia the exudation into the alveoli breaks down much more rapidly, and the peccant matter is thrown off before it has such opportunity of development as from its slow growth is necessary. Thus it would appear that the disease is not *per se* hereditary, but the pre-disposition to such conditions of the lungs as favor the reception and growth of the cause of the disease, is hereditary.

This idea is at one with the known results of the action of various remedies which experience has shown to be beneficial in the treatment of consumption, as arsenic, the hypophosphites, etc. They act probably by inducing fatty degeneration of the cells in the alveoli of the lungs to be followed by their removal by expectoration in a shorter time than would ordinarily occur. So also it is known that persons having patches of lung tissue consolidated may live indefinitely without infection, if at sea, or in mountainous, or other districts, where the infecting organism is either altogether absent or extremely rare. This view of the matter leads naturally to the consideration of the advisability of sending distinctly tuberculous patients to health resorts. It would appear that being once infected the process must go on, though the more favorable conditions of life found in such resorts, and more robust general health there enjoyed, would undoubtedly give them a margin of life they would not otherwise enjoy.

THE ANNUAL MEDICAL BANQUETS.

The fourteenth annual banquet of the Toronto Medical School was held in the Rossin House on the 12th Nov. About 150 students, and a large number of guests sat down to an excellent *menu*. Mr. N. J. Glassford occupied the chair, and most ably fulfilled his duties. His address was listened to with great attention and greeted with applause. The Lieut.-Governor in response to the toast of "The Queen," gave one of his most happy speeches. He recalled to the students the time when nearly all the medicine of Toronto was contained in Dr. Widmer's buggy. Dr. Richardson responding to the toast of the "Universities and Colleges" was greeted with prolonged applause. He believed in the advisability of having a medical faculty in connection with Toronto University. Rev. Dr. Potts responded for Victoria. Hon. G. W. Ross made a few remarks on the educational system of the Province. The delegates from the sister institutions were well received, and succeeded in impressing upon the assembly the importance of the several institutions to which they belonged. Dr. Graham insisted upon the needs of the Toronto General Hospital, and believed it would not be perfect until it controlled half a million of dollars.

Dr. O'Reilly in answering for the hospital was

received with a storm of applause, which showed that the students look upon him as the right man in the right place. He spoke of the facilities given to students for clinical instruction, stating that over 2,500 patients had passed through the wards of that institution during the past year. He also referred to the fact that surgical cases are sent from all parts of the Dominion, making the hospital a kind of surgical centre.

During the evening the Glee Club gave a number of selections which were sung with that peculiar enthusiasm which medical students throw into their vocal exercises generally. Every one seemed to enjoy the evening, and indeed the committee of arrangements may congratulate themselves upon the admirable way in which the affair passed off. The "cold-water system" was strictly adhered to, and the good effects of that beverage were plainly seen, for as the evening wore on, there was none of that unseemly hilarity which so frequently characterizes public banquets.

At the Trinity dinner, also held at the Rossin on the 17th, no less that 224 persons sat down to the good things prepared by mine host, Mr. Irish. The speech by the chairman Mr. McLurg was a remarkably good one, and old Trinity lost none of her prestige by having placed him in the position of honor. Among other interesting remarks he stated that Trinity has now enrolled a larger number of students than any other medical college in the Dominion. The Lieut.-Governor in his response, congratulated the students of the school on the superior facilities they have of acquiring a scientific education, as also upon the grand field of operations in which they have to work, the result, as the speaker eloquently pointed out, of the energy, self-sacrifice, and industry, of their fathers and grandfathers. Mr. Clark replied for the Legislature in a witty speech in which the comparison of the opposite sides of the House to different schools of medicine was well and skillfully carried through. The toast to the learned professions was responded to by a number of gentlemen present. The Rev. Mr. Milligan in a forcible and eloquent speech advised the students especially to be frank and to discharge their ministerial, as well as their strictly professional functions in their practice. He was followed by Prof. Clark, Rev. Dr. Potts, Mr. Baker, of Toronto University, Mr. Hodgson, Inspector of High Schools, and others. The sister institutions were responded to by Dr. McFarlane, and delegates from Toronto Medical School, Queen's, McGill, and the Western University. Dr. McFarlane especially insisted upon the necessity of raising the standard for matriculation in medicine, and in this he had the whole meeting with him, but whether the scheme he proposed to get a uniform standard be practicable, or at least workable, will require some discussion. Space forbids our mentioning the names even of the many eloquent speakers who occupied the floor during the evening. Suffice it to say that the Lieut.-Governor, that veteran diner out, was constrained to say he had never listened to better speeches on an occasion of a similar kind.

One very pleasant feature of the evening was the presence of a lady, Mrs. Pickering, as representative of the Women's Medical School, Toronto. It was regretted that more ladies were not present, but Mr. Irish, with his usual generosity, has empowered the committee to invite the whole ladies school to be present next year at his expense. The dinner was an unqualified success, aad the students and faculty are to be congratulated on the very orderly manner in which the proceedings passed off, the only drawback being the rather late hour at which God Save the Queen was sung.

SKILFUL SURGICAL OPERATION.—The ubiquitous newspaper reporter is still at work in different parts of the country, much to the *disgust* of the medical men in his immediate neighbourhood. The Mitchell, Ont. papers of Oct. 22nd contain an "unprofessional" report of an ovariotomy, and while we readily exonerate the medical gentlemen concerned from writing the offending paragraphs, we cannot but believe that the reporter who penned the following got some professional assistance directly or indirectly. "An opening was made in the lower part of the abdomen, fully five inches in length. Then the intestines were pressed upwards, and the tumor, which weighed nearly four pounds, was skillfully removed." The opening was closed and the young lady is doing nicely, and it is thought that in three weeks she will be as well as ever.

ROGERS' GROUPS OF STATUARY.—The latest addition to the now celebrated collection of this well-known artist is entitled "The Elder's Daughter,"

and represents a Puritan Elder riding home from Sabbath Meeting. He has dropped the reins on the horse's neck and has been absorbed in studying his Bible. His daughter rides behind him on a pillion, while a young man walks by her side and offers her an apple from amongst the hatful he has gathered. This is considered a desecration of the Sabbath by the stern father, who looks at the young man reprovingly. See wood cut representation in our advertising pages.

Treatment of Diphtheria.—Dr. Daly concludes a valuable article on this subject (*N. Y. Med. Jour.*) as follows :

"But there are some rules which I beg you will follow faithfully. These are : (1) Give calomel in its purity ; (2) give it in large doses ; (3) give it frequently (4) give it until you have the free and characteristic catharsis ; (5) give light, nutritious diet ; (6) give little or no other medicine.

"If these simple rules are followed and common sense is allowed to take the place of common prejudice, you will save more of your diphtheria patients by this than by any other method known to modern medicine."

Vaccination during the Incubation Period of Smallpox.—A number of experiments have lately been made by M. Gubert, (*Lancet*) a Russian medical student, chiefly on dogs, to ascertain the effect of repeated vaccinations of persons who may have been infected, or who are in the incubation stage, or who have actually shown symptoms of the disease. By vaccinating on three successive days, he says he arrested the development of the disease in 27 persons who were, he was quite sure, in the incubation stage, and in 12 others the disease was so modified as to be considered varioloid.

Quinine in Whooping-Cough.—Dr. Thornton Parker, writing to the *Phila. Med. Times*, says he has been more successful in treating whooping-cough with solutions of quinine, than by any other method. He recommends that the patient should be exposed as much as possible to the open air, and that particular attention should be paid to the food, clothing and general hygienic surroundings. Every two hours he gives a teaspoonful of solution of quinine, the strength varying from two up to ten grains in the ounce, and he finds that the course of the disease is thus very materially shortened.

British Diplomas.—The following gentlemen have taken the L.R.C.P., London, at the recent examinations : Drs. H. W. Darrell, J. Honsberger, F. C. Hood, C. S. Haultain, and D. O. Jones, of Trinity Medical School. Drs. Bigelow, Caven, Hamilton, Leeming and Carey, (Toronto). Dr. E. C. McDowell of Flesherton, Ont., has taken the M.R.C.S., Eng., in addition to the L. R. C. P., London, and L. F. Miller of Woodhill, the L. R. C. P .Lond.

Malpractice Suits.—We have received a communication from Dr. Whitman of Shakespeare, in reply to the letter from Dr. Knill in our last issue, but as this malpractice suit is still before the courts no discussion on the merits of the case is admissible. When the case is concluded Dr. W. is prepared, if necessary, to discuss it in all its phases with Dr. Knill or anyone else. In the meantime he would ask the profession to suspend judgment in the case.

Antiseptic Dressing.—Lister's latest antiseptic dressing consists of a double mercurial salt made by the sublimation of a mixture of perchloride of mercury and chloride of ammonium, called Sal-Alembroth. The strength used is one to one thousand. The gauze is colored with aniline blue 1 to 10,000. The contact of alkaline discharges changes the blue to red, so that the presence, quantity and quality of the discharges may be readily noted.

Nerve Stretching in Sciatica.—Dr. Strong, (*Peoria Med. Month.*) speaks of a simple and efficient method of stretching the great sciatic in this disease. His plan is to flex the thigh, with the leg in a straight position. This is very simple and has bean successful in Dr. Strong's hands. He flexes the thigh to a right angle with the body, and keeps it there for about five minutes regardless of the exquisite pain it causes the patient.

Quinine an Anaphrodisiac.—Dr. McKinnon of Selma, Ala., believes quinine has the effect of lessening sexual desire if used for long periods of time. He has notes of several cases in which such effect was produced, the persons becoming

alarmed and applying for relief. He believes also that it is more satisfactory than camphor, lupulin, or the bromides in chordee, but must in this case be administered in large doses, frequently repeated.

BASEDOW'S DISEASE.—Prof. Hack (*Deutche Med. Wochenschrift*) has succeeded in curing a case of Basedow's disease in a girl æt. 17, by cauterizing the hypertrophied mucous membrane on the inferior turbinated bones. He believes the disease was in this case at least, purely reflex, and cites parallel cases to sustain the reflex theory.

CIRRHOSIS OF THE LIVER.—Dujardin-Beaumetz recommends (*L'Union Médicale*) in this disease, the hippurate of calcium. He orders the following formula :

℞ Hippuric acid . . . . . ʒ vi
Lime water . . . . . ℥ xvi
Syrup . . . . . ℥ xx
Essence of lemon . . . . ʒ i
S. One tablespoonful several times daily.

TINEA TONSURANS.—Dr. Van Harlingen (*Med. Times*) treats this disease as follows :

℞ Potassii iodidi . . . . . ʒ ss
Liq. potassæ . . . . . ℥ j M.

The hair is to be closely clipped and this sopped on to the scalp, with a pledget of lint, once daily ; when dry, the following solution should be applied at the same points :

℞ Hydrargyri. bichlor. . . . gr. iij
Aquæ . . . . . ℥ j M.

FEVER MIXTURE FOR TYPHOID.—Dr. F. Peyre Porcher gives (*New Orleans Med. and Surg. Jour.*) the following formula for a fever mixture for typhoid :

℞ Spts. æth. nit. . . . . ℥ ss
Pot. acetatis . . . . . ʒ i-ii
Pot. chloratis . . . . . ʒ i
Liq. ammon. acetat. . . ℥ i
Tinct. aconit. . . . . ʒ ss
Tinct. camph. co. . . . ʒ ii-iij
Aq. ad ℥ iv M.

SIG.—ʒ ii every two or three hours while fever lasts.

IODOFORM IN TUBERCULAR MENINGITIS.—Cases of tubercular meningitis successfully treated by the use of iodoform are reported in the *Revue Internationale des Sciences Medicales* for August. The cases were said to be typical ones of the disease. The treatment consists in shaving the head and applying an ointment consisting of iodoform fifteen grains to the ounce. This is applied twice a day and the head covered with a cap. Other symptomatic remedies such as iodide and bromide of potassium, chloral, antipyrin, etc., were also used.

CURIOUS COINCIDENCE.—Dr. Smith of Newcastle N.B., sends us a copy of the "*Courrier des Provinces Maritimes*," Oct. 28, which contains the following :—Some time ago a woman gave birth to twins. These two infants took sick the same day, at the same hour, and with a similar disease. They suffered much for eight days, and both died the same day and at the same hour. They were interred in the same grave.

COCAINE ADDICTION.—If any reader of the LANCET has met with a case of Cocaine addiction and will be kind enough to send the fullest details at command to Dr. Mattison, of 314 State St. Brooklyn, N.Y., he will reimburse him for any expense incurred, and give him full credit in a coming paper.

PILLS FOR AMENORRHŒA.—De Mussy recommends (*Nouv. Remed.*) the following formula :

℞ Salicin . . . . . 1 (grs. xv)
Pulv. rhei . . . . . 0.50 (grs. viiss)
Confect. rosæ . . . . . q. s.
M. Ft. pill no. x. Sig. One to three daily.

EAR-ACHE.—Panesi recommends the following for Ear-ache. Camphorated chloral 5 parts, oil of sweet almonds, 10 parts, and glycerine 33 parts. This is introduced twice a day on cotton as far into the ear as possible. A little of the liniment may also be rubbed behind the ear.

REDUCED MORTALITY IN CONFINEMENTS IN VIENNA.—The death rate in confinements at Vienna General Hospital has been reduced from twenty-eight per thousand in 1866, to two per thousand in 1886, and all this by the improvement in sanitation, and the introduction of the antiseptic system.

MORTALITY FROM ANÆSTHETICS IN ENGLAND.—The number of deaths reported in England from

anæsthetics during 1885 was fifteen, of which only three occurred from ether, and the other twelve from chloroform.

STERILITY.—A writer in the *N. Y. Med. Jour.* states his belief in the efficacy of belladonna in the sterility of females. Women with good health, and who are nevertheless barren have he says on several occasions become pregnant after a few weeks' use of belladonna.

ASEPTOL.—Aseptol, says F. Hueppe, is likely to take the place of carbolic acid as an antiseptic and disinfectant. It is not irritating in solution up to ten per cent. It has a more pleasant odor than carbolic acid, is more soluble, is less poison ous and irritating, while it is equally efficacious as an antiseptic.

APPOINTMENTS.—Drs. A. H. Ferguson (Trin.), and Dr. Patterson, have been appointed physicians to the Winnipeg General Hospital. Drs. Codd and Whiteford have been appointed on the Consulting Staff.

CORONER.—Dr. J. H. McLellan of Lambeth, Ont., has been appointed Coroner for the County of Middlesex.

See special Club rates for LANCET and other journals for 1887, among advertisements.

Books and Pamphlets.

THE HEALING OF ARTERIES AFTER LIGATURE IN MAN AND ANIMALS. By J. Collins Warren, M. D., Assistant Professor of Surgery, Harvard University; Surgeon to the Massachusetts General Hospital; Member American Surgical Association; Honorary Fellow Philadelphia Academy of Surgery. New York: W. Wood & Co.

We could well have believed that to all American readers the name Warren might have served as sufficiently attractive and assuring without the above accumulation of honorary entitlements; but as the United States is a very fast country it is most probable that the memories of departed great men pass more speedily into oblivion than in other lands of more tardy progression. Be the fact as it may, this book of J. Collins Warren is no discredit to his venerated patronym. The introductory history of "*The Ligature of Arteries*," involving as it must have done, a range of surgical authorities from 1500 years anterior to the Christian era, down to the present time, must have been an almost Augean labor. The bibliographic references given by the author amount to 235, and it is very gratifying to us to note that our countryman, *William Osler*, closes the roll of honor, with the date 1886. Dr. Warren's industry bespeaks the survival of ancestral enthusiasm: it must remind the Harvard student of 50 years ago, of the admirable anatomical museum of the *great Warren*—a skeletal collection of which the city of Boston might well be proud.

As a surgical experimentor the author has given abundant proofs of his untiring devotion and his faithful recordance of useful facts. Ardent theorisers may derive very valuable instruction from the details of his numerous operations, all of which are given with desirable brevity and commendable clearness. Did available space permit the indulgence, we might, acceptably to the readers of the LANCET, quote numerous passages which would testify to the practical value of the work. We restrict our citations to the following closing lines: "We know that both silk and hempen ligatures can become either encysted or absorbed; in other words, they can be so applied as not to interfere with the healing process. Provided the ligatures be adjusted so as to obstruct permanently the flow of blood through the vessel, it is manifest, from the observations which have been described, that a destruction of a certain portion of the vessel walls, and a retraction of the ends of the vessel, must eventually take place, no matter what the nature of the material may be, or how it may be applied. The prime object, therefore, to be obtained, is to employ such methods as will interfere as little as possible with the natural sequence of events which follow one another during the process of repair under the most favourable conditions. When the ends of the vessel are once sealed by the formation of an external ring or callus, and the rest of the wound is promptly healed by first intention, so that the growth shall not be prematurely broken down by suppuration, all danger of hemorrhage is avoided. The rules of antiseptic surgery supply us, therefore, with a more certain method of securing the desirable result than any other plan which, up to the present time, has been proposed."

A MANUAL OF DIETETICS. By J. Milner Fothergill, M. D., Ed.; Physician to the City of London Hospital, for Diseases of the Chest, etc., etc. New York: William Wood & Co. pp. 225. 1886.

The author's name is so widely and favorably known on this side of the Atlantic, both as a teacher and writer, that we are sure this new work from his pen will be welcomed by the profession at large. Nor will anyone be disappointed after a persual of its pages. The question of dietitics has lately attracted much attention, and we are sure it has been ably handled by Dr. Fothergill in his present work. Part one deals, among other things, with the forms of food, methods of preparing, stimulants, prepared foods, etc., and will prove invaluable to the practitioner, while it will direct the student's attention to the importance necessary to be paid to the consideration of the food of patients. In part two he speaks of the food best adapted to various ages, and in various forms of disease, as struma, gout, phthisis, anæmia, etc., always giving in his own clear and lucid manner, reasons for such foods being administered as he suggests. The chapter on "Food in Gout" is worthy of special mention. We heartily recommend the book as a very valuable addition to the practitioner's library.

A LABORATORY GUIDE IN URINALYSIS AND TOXICOLOGY by R. A. Witthaus, A.M., M.D., Prof. of Chemistry, Med. Department University of New York. Wm. Wood & Co.

This little work will be found a very convenient and useful guide in laboratory work. It is pocket size and has blank pages for note-taking by the student. We heartily commend it.

THE PHYSICIAN'S POCKET DAY BOOK. By C. Henri Leonard, Detroit, Mich. Price $1.

This excellent little visiting list has accommodation for 25 or 50 families weekly, also an obstetrical record, monthly memoranda and cash accounts. It is very convenient in form being about the size of an ordinary wallet. There are no tables or lists as in most other works of the kind. It is, therefore, the smallest and lightest in the market.

THE PHYSICIAN'S VISITING LIST FOR 1887. Philadelphia: P. Blakiston, Son & Co.

The old reliable visiting list of Lindsay & Blakiston is to hand for 1887. This is the 36th year of its publication and for convenience, compactness and strength it has no superior. It is arranged for 25, 50, 75 and 100 patients per week. Many useful tables and lists are to be found in the work besides space for visits, obstetric engagements, cash account, etc.

A MANUEL OF OBSTETRICS by A. F. A. King, A.M. M.D., Prof. of Obstetrics, Columbia University. Third Edition. Philadelphia: Lea Bros. 1886.

Much of the work has been re-written and such additions and alterations made as were considered necessary to keep it fully abreast of the most recent advances in obstetric science. New illustrations have been added, selected from standard authors.

Fothergill says of insomnia; "Opium is the agent where insomnia is due to pain; chloral where it is due to a high blood pressure in the arterial system; the bromides where there is any peripheral irritation.

"I want some preserves on my bread," whined a boy to his mother. "Johnny," coaxed the mother, "that nice butter and sugar is the thing for little boys." "I won't have it. 'Taint nothing but gluccose and oleomargarine, and it's pizen. Gimme preserves if you don't want your little boy to die." He got the preserves.

Births, Marriages and Deaths.

In Winnipeg, Man., on the 25th of Oct., the wife of Dr. A. McDiarmid of a son.

At Alliston, on Friday, November 12th, Samuel Bell, M.D.

On the 31st October, Dr. Byron Franklin, of Port Rowan, aged 55 years.

On the 25th ult., Dr. Aikman, of Woodstock, aged 60 years.

*** *The charge for Notices of Births, Deaths and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communication.*

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Original Communications.

FRACTURES OF THE THIGH.*

BY A. B. ATHERTON, M.D., TORONTO.

Fractures of the femur are naturally divided into those of the neck, shaft and lower end.

Those of the neck are sub-divided into intra-capsular and extra-capsular fractures, according as they take place within or outside the capsular ligament of the hip-joint. Many fractures in this locality, however, partake more or less of both characters.

Intra-capsular fracture generally occurs in persons over fifty years of age, and is much more frequent in females than males. The thinning of the osseous tissue, the increased deposit of fat in the cancellar tissue and the more horizontal position which the neck of the bone assumes in old age all assist in making fractures of the neck more common in the later periods of life.

The trochanter major is occasionally separated from the rest of the bone, either as an independent lesion or in conjunction with fracture of the neck.

When the fracture is an impacted one crepitus is of course absent, while all the other symptoms are present in a less marked degree than in cases of complete fracture. In such fractures it will not always be an easy matter to recognise them from a severe contusion of the hip, for it is not justifiable to exercise any violent force in order to get crepitus, lest the impacted fragments be separated and thereby the treatment and result be rendered less successful. All cases of doubt should therefore be handled with care from the first.

I may here remark that I think the best way of getting at the true length of a limb is by measuring from the anterior superior spinous process of the ilium to the tip of the inner malleolus. Some prefer to start from the umbilicus, but it seems to me that this point would be more apt to vary somewhat with change of position, and be therefore not so reliable for purposes of measurement.

Some considerable discussion has at different times taken place as to the cause of the very general occurrence of eversion in fractures of the neck of the femur. In cases of complete fracture it is probable that the foot and leg falls outwards by their own weight, just as they naturally do when one is lying on his back while the muscles are relaxed, as in sleep. It has been thought also that the glutei muscles are influential in producing this effect. Bigelow has demonstrated that the cortical bony tissue is more strongly developed on the anterior side of the neck than on the posterior, and he contends that this is the reason why in impacted fractures the latter part yields more than the former and consequently gives rise to more or less eversion of the leg. On examination of the bone we also observe that the posterior part of the neck is hollowed out more than the anterior, which is especially marked at its upper part where the first force of a blow upon the trochanter major would be felt. This we think would tend to the more ready yielding of the posterior side of the neck, even though the tissue were of the same density throughout.

The accidents most likely to be mistaken for fracture of the neck of the thigh bone are (1) some fractures of the pelvis; (2) dislocations of the bone; and (3) severe contusions of the hip. It is not always easy to diagnose between fractures of the neck and those of the acetabulum, but as the treatment would be the same it is not so important to make the distinction. Recent dislocation is usually known by the greater fixation of the head of the bone. When, in cases of impacted fracture, there is much swelling of the soft parts, especially if the patient be a fat subject, it will often tax our powers of diagnosis to the utmost to decide as to the existence of the fracture. As before stated, however, we must when in doubt give the patient the benefit of that doubt and treat the case as one of fracture. There are two methods of assisting us in the diagnosis of fractures of the neck of the femur which are often found serviceable. One is the observation of Nélaton, that the

*Read before the Ont. Medical Association, June, 1886.

top of the trochanter in the natural condition of the parts always lies in the line drawn from the anterior superior spine of the ilium to the most prominent part of the tuber ischü. The second is Bryant's test, which consists in letting fall a vertical line from each anterior superior spinous process to the mattress, and comparing the distances from each trochanter to the nearest point on these lines. On the side of fracture the distance will be found to be less than on the uninjured side.

Still another measurement is mentioned in Holmes' Surgery, called the transverse; which is obtained by taking the distances from the median line of the body to the vertical antero-posterior line at right angles to the former drawn through the top of each trochanter. On the side of fracture the distance will be found to be diminished on account of the inward displacement of the bone due to the impaction.

Fractures of the shaft of the bone are caused both by direct and indirect violence, and are most frequent in the middle third. They occur at all ages, and are occasionally due to muscular action alone, especially in persons whose bones are weakened by scrofula or other cachexia, or in cases which are effected by a latent form of osteitis. I have myself seen a fracture in a female of about forty-five years of age caused by simply turning in bed. Rheumatic pains had preceded the event for some weeks. In another case I saw a surgeon of eminence produce fracture of the femur in a child while examining, with the exercise of but little force, the condition of the limb in long standing hip disease.

We are inclined to think that as to the direction of the fracture it would generally be outwards and forwards for two reasons, viz.: 1st, the facing inwards of the head of the bone; 2nd, the fact that the posterior side of the shaft is usually considerably concave. In all cases where the shaft is broken by a fall from a height upon the feet it will be readily seen that the force of the fall would be transmitted in a direct line from the condyles to the acetabulum, and would therefore cause the shaft to bend in an outward direction. This effect would, however, be probably somewhat modified by the posterior concavity of the bone so as to produce more or less projection of the broken ends forwards. Again in cases of fracture caused by a force acting directly upon the bone, the latter not being a fixed part would be apt to rotate a little so as to bring the fracturing force somewhat towards its concave side, and thus a more or less anterior direction would be given to the displacement.

Usually there will be no difficulty in diagnosing fractures of the lower end of the femur. In all, except fracture of one condyle, there will be shortening of the limb. Crepitus will also be present, except in the rare cases of impaction. When there is a T fracture of the condyles, we may expect to find widening of the end of the bone; also in all forms of fracture into the joint there will be much swelling of the knee.

In fracture of the lower end of the shaft just above the condyles the upper fragment is generally displaced anteriorly with perhaps a slight variation to either side. The lower fragment is rotated backward by the action of the popliteus muscle.

Having thus briefly considered a few points in connection with the various fractures of the thigh, let us now direct our attention to their prognosis and treatment.

In complete fracture of the neck within the capsule, bony union is very rarely attained, and there will result a considerable amount of shortening, varying from one to two inches. Furthermore, more or less lameness and disability will persist to the end of life. Sometimes even death will ensue after a variable time in these cases, because of the confinement and consequent bed-sores arising in the old people, who are generally the subjects of this form of fracture. Many of these patients will not submit to the application of the usual kinds of apparatus intended to keep the limb at rest or secure extension. In such we must often be content with simply flexing the leg and thigh and placing the limb quietly on its outer side upon a pillow, or if that position does not satisfy the sufferer we must try to find some more comfortable one. Thomas' splint for hip disease is recommended for some of these cases, by which means the patient can be allowed to move about on crutches instead of being confined to bed.

Impacted fractures of the neck, when carefully handled and treated with proper skill, may not get displaced from their original position and will then probably recover with but little shortening and a useful limb. In fractures of the shaft in adults there will result generally shortening of

from ½ to ¾ of an inch, no matter what plan of treatment we adopt. Exceptions to this rule are sometimes met with in cases of severe shock where the muscles are more or less paralyzed for a time and therefore do not exert their usual contractive power. I have only once seen such an instance in a man who had in addition to fracture of one thigh, compound comminuted fracture of both patellæ, Colles' fracture of both radii, two fractures of the lower jaw, and a rather serious injury of the thorax. In the case of young children recovery usually takes place with little or no shortening. This is probably chiefly due to the comparatively thick periosteum preventing much displacement of the fragments. Also the weak muscular action may account in some measure for the favorable result.

Fractures of the lower end of the bone are generally rather serious, because of the very great tendency there is to anchylosis of the knee joint in these cases. As to treatment, there is now a pretty general consensus of opinion that Buck's method of extension by means of strips of adhesive plaster to the sides of the limb, and the attachment thereto of a weight and pulley, is the best method to employ in order to avoid an excessive amount of shortening. Counter-extension is best got by raising the foot of the bedstead. As to the accessory application of coaptation-splints, and the use of a long outside one to prevent eversion of the leg, opinion seems to be more at variance. Some employ sand-bags in lieu of both these. It may do to pursue this plan in hospital practice where a house surgeon is on hand all the time to rectify any displacement of the limb or bags, but in ordinary private practice, especially in country districts, it will be found that both the coaptation splints and the long outside one will be necessary to insure continued rest of the fragments of bone and the avoidance of eversion. In fractures of the neck it is well to mould a broad splint of poro-plastic felt to the outer side of the hip, while the long wooden splint will also be required to prevent eversion.

In fracture of one condyle, as there is no shortening, there will be no need of any extension. The broken fragment must be brought into position as well as possible and maintained there by the use of a well-padded splint of poro-plastic felt or binder's board, and perhaps a long wooden splint to either the outer or inner side to correct the lateral bowing of the knee, which is apt to occur. Gooch splints may be substituted for poro-plastic material or the binder's board in many cases for coaptation purposes with good results. Little or no extension will be required in the partial fractures of children, but with the above exceptions extension will always be necessary in fractures of the thigh.

There exists some difference of opinion in regard to the weight to be attached to the leg in order to counteract the muscular contraction. Some surgeons advise the use of as much as thirty or forty pounds for this purpose. As far as my observation goes, however, I think that so great a weight will often give rise to a good deal of pain and discomfort, while I believe it defeats its own end by causing more or less spasmodic action of the over-stretched muscles. In children, from 1½ to 6 pounds, will generally be found sufficient, while in adults, 8 to 12 or 13 pounds will retain the limb at the greatest attainable length.

As to the coaptation splints, in the upper third of thigh the tendency of the upper fragment to outward and forward displacement must be met by a broadish splint, running well up over the hip-joint, also an inner one will be required to aid in pressing the lower fragment into line with the upper end of the bone. In the middle third three splints will usually suffice to retain the bone in position; one for the outer, another for the anterior, and the third for the inner side. The mattress, on which the patient should always be placed, will support the parts sufficiently posteriorly. In fractures of the lower end of the femur especial care should be taken to bring the fragments into good position, and then a plaster or poro-plastic felt splint, well padded, should be applied posteriorly from six or eight inches above the fracture to below the calf of the leg. This may be supplemented by other splints of similar material to the sides, if the case is one which seems to demand it. A slight amount of flexion is generally to be allowed to the knee, so as to aid in coaptation of the lower fragment, which is apt to be turned backwards by the action of the popliteus muscle. If in spite of flexion of the knee, the lower fragment still projects very much, the tendo-achilles may be divided, with good effect. McIntyre's splint is sometimes used in these fractures, but in that case one must sacri-

fice more or less in the way of extension, as the latter cannot be carried out so well when the limb is laid on this splint.

Up to a few years ago, Liston's or Desault's splint was in pretty general use in Great Britain for fractures of the shaft and neck of the femur; but of late we think it has been, to a large extent, superseded by Buck's method. A piece of gutta percha moulded to the groin and afterwards padded with lint, may obviate to a considerable extent the irritation usually set up by Liston's perineal band, which is one of the drawbacks to his method.

Some years ago, Nathan Smith, of Baltimore, invented an anterior splint, consisting of two parallel wire bars running the whole length of the limb, and bent somewhat in the middle and at both ends in order to conform to the shape of the parts. This, after being secured to the front of the limb by bandaging, was slung by two hooks—one above and the other below the knee—to a pulley above the bed. From what little experience I have had with this apparatus, I have not formed a very favorable opinion of it, and would not employ it again.

In some rare instances of fracture in the upper third of the thigh, where the short upper fragment tends, in spite of the ordinary coaptation splints, to project much anteriorly, the double inclined plane may be tried. By so doing, however, much extension cannot be got by the use of strips of adhesive plaster, as they can only be applied to the sides of the *thigh* below the seat of fracture.

In the case of young children, where the bandages, etc., are apt to become wet and soiled by the excretions, Bryant recommends vertical extension by attaching the foot and leg to a bar or hook above the bed, the weight of the body acting as the counter-extension. We think, however, that the use of a starch or plaster-of-Paris bandage, protected by a piece of rubber cloth or some kind of varnish, will answer sufficiently well in such cases.

In conclusion, let me emphasize the importance of the following practical points in the treatment by Buck's method:—

1. Always insist upon having a good, firm, even mattress under the patient, so as to prevent sagging of the hips or other parts of the body.

2. Remove the foot-board from the bedstead, so as to have no obstruction in the way of the downward movement of the body, which is apt to take place more or less on account of the constant traction of the weight. For the same reason, the pulley should be placed at some little distance from the foot. These precautions are not so requisite, perhaps, in hospital or city practice; but they will be worthy of attention in the country, where the surgeon is often not able to visit the patient more frequently than once in a week or ten days.

3. The strips of plaster should be applied exactly along the central part of each side of the limb, their upper ends reaching up as far as the fracture, so as to relieve the strain upon the ligaments of the knee-joint.

4. Bandage the limb from the toes up.

5. Place a cushion of folded blanket, or other suitable material, between the heel and calf of leg, so as to avoid ulceration of the former part from pressure on the bed.

6. See that the position of the pulley be such as to ensure traction in the line of the limb or in a direction a little above that line, otherwise the friction of the member against the mattress will more or less counteract the weight extension.

7. When the long outside splint is used, be careful to pad well the part above the malleolus, so as to protect the latter from pressure.

8. Steady traction is to be maintained by the assistant, until everything is in readiness for the attachment of the weight extension.

OVARIAN-UTERINE OPERATIONS.*

BY E. H. TRENHOLME, M.D.,

Prof. of Gynæcology, Bishop's Medical College, Montreal.

In this brief paper it is my desire to refer to some of the details connected with operations for the removal of the uterus, or its appendages. It is not my intention to refer to the diagnosis of uterine ovarian disease, nor deal with the after-treatment, to any great extent.

With regard to the preparing of the patient for the operation, I would advise you not to resort to purgatives, especially avoid aloes and castor oil, both of which favor congestion of the hemorrhoidal vessels, and consequently renders the patient more liable to inflammatory action. The bowels should

* Read before the Can. Med. Association, Aug. 19, 1886.

be brought into gentle action by diet and mild laxatives; avoid emptying the bladder, especially in extirpation of the uterus, its presence being easily recognized when full and not so liable to be injured; the legs should be wrapped in cotton wool, especially in cold weather, and the temperature of the operating room not less than 85°. The cotton wool can be removed after reaction has been established. There should be ready for use, a couple of dozen of hot towels, which are to be applied, as need may arise, around the body and over the abdomen during the operation; the temperature of the exposed bowels and surface of the body can in this way be easily maintained. It also protects the patient from escaped fluid and blood. I prefer to stand on the right side of the table, which is placed diagonally to the window, so as to allow the light to fall directly upon the abdomen of the patient.

The instruments required for these operations need not be very numerous nor complicated; generally speaking, a scalpel, scissors, director, half a dozen Keberle's forceps, three or four sponges, silver wire, shoemakers' thread, and horse-hair, a needle-holder and needles will suffice. I would press the importance of having clean sponges, instruments and hands, and allow no explorations of the parts during the operation by other hands than your own. Not only must the sponges be clean, but they require to be carefully washed during the operation, in plain water, and then squeezed out of carbolized water before being handed back to the operator. This part of the work should be entrusted to a competent assistant; abundance of boiling water and water, that has been boiled only should be used. If this is attended to, it matters little whether or no carbolic acid is used. It is well, however, to have all instruments, at the time of operation, kept in a 1 to 20 solution of carbolic acid. For ligating the pedicle and all vessels, No. 20 shoemakers' white thread, single or double, well carbolized, is all that is needed. My reasons for preferring this ligature to all others are, that it is quite strong enough, even single, to secure all the vessels that should be enclosed in one ligature, that it affords a safe knot, is easily disintegrated and removed by absorption. This ligature should be soaked at least 24 hours in pure carbolic acid before using, and not allowed to come in contact with water, and for convenience it may be cut into lengths of about 15 inches and allowed to stand in pure alcohol. For closing the abdominal wound there is nothing better than silver wire for the deep, and carbolized horse hair for the superficial sutures. Great care should be taken when closing the wound, to have the divided structures carefully coapted, while at the same time avoiding the inclosure of any muscular tissue—as advised by Dr. Goodell. By attention to this last point we avoid suppuration in the track of the sutures, and save the patient a great deal of suffering. There can be no advantage from effecting union between the recti muscles. It cannot possibly strengthen the abdominal wall, and must interfere with the proper action of these muscles.

In removing the silver sutures cut the wire close to the skin, with the blades of the scissors lengthwise of the body. In this way, pain and injury of the tissues in the track of the wire are avoided. In all my operations I use horse-hair for the superficial sutures, and never, in any instance, has it slipped or caused the slightest irritation. As to the abdominal wound, there is much need for good judgment in selecting the best place and mode of making the incision. It is most important to confine the wound, as nearly as may be, to the median line midway between the umbilicus and the pubis. In no case should the incision be extended toward the pubis nearer than one and a half inches. The reason for this is that the lower parts of the abdominal wall are the most important for suspension of the bowels, and also because the ligamentous structures of that part, when once divided, are difficult to coapt and retain in juxtaposition till union takes place. A small incision of $1\frac{1}{2}$ to $2\frac{1}{2}$ inches is all that is needed in most cases of ovariotomy or removal of the uterine appendages, and when this wound is properly made, it unites perfectly and becomes almost obliterated after a few months. The abdominal incision should be made in the median line, so as to divide the sheath of the recti muscles without cutting a single muscular fibre, for the reasons already given. The division of the skin and adipose tissue should be made at one stroke of the scalpel; it is worse than mere waste of time to divide the structures upon a director layer by layer; it is a bungling way to operate, and leaves the edges of the wound in such a state as to interfere with primary union. Care is needed in entering the peritoneal cavity; but be

sure you are in the cavity before proceeding further with your operation; I have seen more than one operator attempt to enucleate the cyst before the cavity had been reached.

In ovariotomy or spaying, having reached the pedicle, it should be ligated in small segments, taking care to avoid wounding any vessel, and, when possible, ligating the larger vessels by themselves—use the linen thread, tie firmly and cut off short—you need not fear hemorrhage. Always divide the distal end of the pedicle with the scissors, and at least ¼ of an inch from the ligature. I need not refer to the importance of thoroughly cleansing the cavity, and introducing a drainage tube when necessary, or a piece of carbolized lint. It is not advisable to allow a drainage tube to remain longer than 36 hours.

We have already referred to the closure of the wound, and therefore speak of external supports. I advise the use of carbolized gauze to the wound, a pad of six or seven thicknesses, three inches wide, placed on the wound, and kept in place by two or three straps of rubber plaster, not more than ten inches long. I allow no other dressing, except in those cases where the tumor removed was of enormous size and the parieties flabby, when an abdominal bandage is applied for 24 or 36 hours. Bandages are of no use, they greatly inconvenience the patient, and interfere with the use of hot water fomentations, which are of great comfort and service in almost all cases for the relief of pain and arrest of threatened inflammatory action. Another point is, that I allow my patients to move in the bed, so as to secure the most comfortable position. If the vessels are properly secured there is no danger of hemorrhage, and the relief from a constrained position, long maintained, is of great value in securing nerve and muscular rest. I also believe such movement favors the restoration of the natural position of the bowels, which sometimes become deranged during the operation. Anyway, I have never seen any ill effects from such movements.

With regard to removal of uterine fibroids, I have been led to vary the operation a good deal. When the growth is large, I think it well to divide the mass in a vertical line, having, of course, constricted the pedicle to prevent bleeding, and then having enucleated the growths, I form the stump of the uterine tissue only, making the V incision, referred to in a former paper upon this subject This mode of forming the pedicle has been used by myself for some years; yet inasmuch as Auguste Martin has adopted the same procedure, I am unable to say which of us is entitled to priority. One great advantage in thus operating is that a pedicle can always be secured, and the vascular connection of the flaps with the pelvic circulation need not be completely cut off. By this procedure the roof of the pelvis is maintained for the support of the abdominal viscera. The quilting, or shoemakers' stitch, used by me to coapt the flaps, suffices to control all hemorrhage after the ligation of the uterine arteries. The advantage of this mode of dealing with the pedicle requires no special pointing out. Another thing to which I would refer, is the value of linseed tea enemata; they greatly facilitate the passage of flatus, and give much comfort to the patient, while they are valuable for the sustentation of the patient at a time when but little nourishment can be administered by the mouth. The value of hot water fomentations in threatened peritonitis and cellulitis, is worthy of more attention than is generally supposed to be necessary. To be useful, however, they must be efficiently applied, and here I would say, trust no one to do the work without you have seen that they can do it well.

As to medicinal treatment, I hold but little to it. Aconite in solution, in two or three drop doses every four hours, is of some value when the pulse is wiry and quick, and the skin hot and dry. For the distress arising from flatulence, I have found caraway tea frequently do good service. When possible, avoid using the catheter; allow the patient to pass her water voluntarily.

There are many points connected with uterine ovarian operations which I have not alluded to, but have briefly referred to some things that I deem to be original, and to others that, perhaps, are not generally known. My main object, however, has been to elicit a discussion, and if in this respect my hopes are realized, I shall be satisfied.

An interesting discussion followed upon the reading of the paper, a report of which will appear in the "Transactions of the Canada Medical Association."

THE London *Lancet* will be edited by Dr. Wakley, nephew of the late editor.

TRIGGER FINGER.

BY A. M'PHEDRAN, M.B., TORONTO,
Physician to the Hospital for Sick Children.

A. P., æt. 38, employed in a wholesale shoe establishment, in which he operated a machine requiring considerable pressure to be made by the fleshy part of the thumb of the left hand. His history is good, not rheumatic. During the early part of last summer he found there was some pain and stiffness in the movements of the thumb. This increased, and when I saw him a few weeks after the symptoms first appeared, the last phalanx was arrested in partial flexion, on increasing the effort the impediment suddenly gave way, and flexion was completed with a penknife-like "snap," accompanied by sharp pain. Exactly similar symptoms were produced by extension. The pain was referred to the anterior surface of the metacarpo-phalangeal articulation, and pressure over the long flexor tendon at this point caused sharp pain, but no nodule or other abnormality could be found. This condition was of much annoyance to him as besides interfering with his work, it was frequently being flexed by coming into contact with objects, and at night he was often wakened by the pain. He was advised to wear a leather splint to keep it in a state of extension; this was to be removed night and morning and friction and passive motion resorted to freely. With the exception of a little stiffness he recovered completely some time ago.

This affection is a rare one; the only description of it that I have seen is in the proceedings of the New York Neurological Society,* which came under my notice some time after I had seen this case. In this Dr. Geo. W. Jacoby records two cases, and refers to several published in Europe. He collected altogether 33 cases, two-thirds of which occurred in females. The thumb is affected oftener than any one of the fingers. Sometimes extension only is interfered with. The condition has to be distinguished from paralysis and spasm of muscles and from rupture of tendons, all of which may lead to sudden extension after flexion or *vice versa*. In almost all the cases recorded, as in all nodule very painful on pressure, was found adherent to the flexor tendon near the metacarpo-phalangeal articulation, and to it are to be attributed all the phenomena. No such nodule could be found in the case given above, though it was carefully sought for. The etiology is uncertain; in the majority, as in this case, it is possibly traumatic. Rheumatism may be a cause in some. Possibly the cause may be in the articulation in some cases.

Since writing the above, five additional cases have been published in the Proceedings of the N. Y. Surgical Society, by Dr. Abbe (*Medical News*, Dec. 4), and a very interesting selection on the "Mechanism of Trigger Finger," by Dr. Steinthal, of Heidelberg, is given in the *Annals of Surgery* for November.

*Philadelphia *Medical News*, June 10th, 1886.

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—The ex-president of the College of Physicians and Surgeons of Ontario, on retiring, criticized severely the utility of the Council. A committee investigated the matter and found the charges groundless. Here the matter ended. This is unfortunate. The committee surely could not have been possessed of some of the facts of the case, or their finding would have been modified. They certainly had reason to congratulate themselves that now there is but one licensing body, but there is abundant evidence that the examinations of the Council are too easy and not sufficiently practical.

As to the first indictment, that a man should become a matriculant of the College, it is deemed sufficient that his literary education should not exceed that required for third class teachers' certificates, with Latin; the easiest examination in the High School course Yet, easy as this appears to be, the Council accepts men whose marks in Latin would not entitle them to third class certificates. Moreover, some young men who had hard labor for years to pass this matriculation (?) have obtained a license in two years and six months, without any difficulty.

A large number of third year students wrote for the license at the last examination, and not one failed, *i.e.*, two and a half years after they registered their names as medical students, they received a license.

A practitioner licensed in April, '86, during his

30 months' pupilage, managed to teach in Provincial High Schools 13 months, spend some time in the civil service in Ottawa, and teach night school while in Toronto. Another licentiate of '86, who neither possessed nor had access to final books till after Jan. 1st, 1886, passed the final examination in April, with honors, in four or five subjects. Several men engaged in teaching school from 9 a.m. till 4 p.m., every day but Saturdays, who do not neglect their schools and accompanying night exercises, pass easily in three and a half years, *i.e.*, four sessions of six months each, which, from the very nature of things, they cannot possibly attend. It may be said that it is no concern of the Council, where a man obtains his information or how long it takes him to get it; but surely it should take average men longer than two and a half years to acquire information enough in medicine and surgery, to have permission to tamper with men's lives.

In the second place, the final examination is altogether unpractical. Candidates are not asked to diagnose cases in medicine or surgery. Skill in palpation, auscultation or percussion is not looked for. No operation on a cadaver or practical device in minor surgery is expected. Physical skill is ignored. Hospital work is useless to candidates at the Council's final, and hence is neglected.

If I dared to trespass further on your valuable space, I could give instances of blunders made in the hospital theatres and the dispensaries by some of our best men; and when such is the case, what would likely happen in the practice of those who neglect their opportunities for experience?

Yours, etc.,

G. R. CRUICKSHANK.

MEDICAL REGISTRATION IN ONTARIO.

To the Editor of THE CANADA LANCET.

SIR,—One of the important question, if not the most important, that will engage the attention of the Medical Council at its next meeting, will be that of registration of English practitioners. Hitherto the only requisite has been the payment of the registration fee. But now, it is proposed to change all that, and compel all applicants for registration to undergo the examinations of the Council.

It is instructive, in view of this proposed change, to contrast the action of the profession in the United Kingdom, with the proposals of the Ontario Council. And in order to do this I may give a summary of the provisions of the recent Medical Act which comes into force next June, in so far as they affect colonial practitioners.

Under this Act, the right of registration in the old country, which Colonial Universities and qualifying boards have all along claimed as due to their standard of medical graduation, is granted on the following conditions:

(1) "That the applicant holds some medical diploma or diplomas granted to him in a British possession to which this act applies, and that he is by law entitled to practice medicine, surgery and midwifery in such British possession. Then, on application to the registrar of the General Council, and on payment of a fee not exceeding five pounds, he shall be entitled, *without examination* in the United Kingdom, to registration as a colonial practitioner.

(2) "That the diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom, or in the course of a period of not less than five years, during the whole of which he resided out of the United Kingdom."

The condition "in a British possession to which this act applies" is defined in the Act, as being a colony where equal privileges are granted to English practitioners. In view of this concession on the part of the home authorities it is difficult to find a reason for the proposed action of the Ontario Council. It has been suggested that the principal reason for passing this regulation is the fact that many students of medicine, in the different parts of Canada, avoid the examinations of the Council by going to the old country; and on their return, claim registration in virtue of their British qualifications, with consequent loss of fees to the qualifying body here. But there are higher considerations than fees. Surely the "National Policy" has not extended to the practice of medicine. Are the ailments of the Canadian public to be "protected" as against the skill of an English practitioner, in favor of those who have paid the fees of the Medical Council? If so, when the public finds this out, short work will be made of the privileges of the College of Physicians and Surgeons of Ontario.

It certainly cannot be argued that the condi-

tions upon which licenses are granted in Great Britain render it necessary to hold examinations in Canada in order to protect the public against incompetent practitioners. It is true that it is said that some who failed to pass the examinations of the Council here, have gone to Edinburgh and obtained a license there. This may be perfectly true. On the same ground exactly it might be argued that the examinations of the Council here are too easy because many men, who have failed to pass the examinations of the Universities, have succeeded in passing before the Council. These things are simply the accidents of examinations and prove nothing. To those who know how much practical work is needed to obtain a license in Great Britain as compared with Ontario, the idea of holding further examinations here, on British licentiates, is a little absurd. If the reason for the proposed change be that when students go to the old country, the fees are lost to the Council without any real advantage to the student, owing to the shortness of the time he spends there; then a much more dignified way out of the difficulty would be to refuse registration to such students, unless they have spent one or more years in one of the medical schools of Great Britain, and have obtained a creditable diploma. To shut the door in the face of the English practitioner is rather a heroic remedy for the small evil of losing student's fees! If Canada possessed the advantages of the great medical schools of Edinburgh and London, and exacted a much higher standard of medical knowledge than obtains in Great Britain, then we would have some excuse for being exclusive. We possess neither the one nor the other, and now, that equal rights can be secured to the colonial practitioner, by making registration in England and the colonies reciprocal, it is neither dignified nor good policy to enact prohibitory laws.

Yours, etc.,

D. E. J.

Toronto, Dec. 5th, 1886.

RE DOVER'S POWDER.

To the Editor of the CANADA LANCET.

SIR,—I notice in the CANADA LANCET for Nov., an article from *The Asclepiad*, on Dover's Powders. I have in my library a work, entitled, "The Ancient Physician's Legacy to his Country," by Thos. Dover, M.B., 1732, in which, under the treatment of gout, he gives the following prescription:—"Take opium, one ounce; saltpetre and tartar vitriolated, each four ounces; *ipocacuana*, one ounce; *liquorish*, one ounce. Put the saltpetre and tartar into a red-hot mortar, stirring them with a spoon till they have done flaming. Then powder them very fine; after that, slice in your opium; grind these into a powder, and then mix the other powders with these. Dose: from forty to sixty, or seventy grains." Is not this the original Dover's Powder? Judging from his book, Thomas Dover, M.B., was an arrant humbug.

Yours truly,

WM. J. ALMON, M.D.

Halifax, N.S., Nov. 28, '86.

Reports of Societies.

CHATHAM MEDICAL AND SURGICAL SOCIETY.

The monthly meeting of this society was held November 3rd, Dr. J. P. Rutherford, president, in the chair.

Dr. Tye read a carefully prepared paper on The Differential Diagnosis of Hysteria from Diseases of the Brain. He narrated a couple of cases where, after a thorough examination by two or more medical men, hysteria was diagnosed in each case; and yet, within a few days, one patient died of an uncertain brain disease and the other of tubercular meningitis. He quoted Gowers to the effect that hysteria simulated nearly every organic brain disease. Dr. Grassett, of Montpelier University, France, in "Brain" for January, 1884, advances the theory that hysteria is a symptom of the tubercular diathesis, and that attacks of each may alternate, one with the other. The reader of the paper has noticed this in many cases, and his attention was drawn to it in the above journal. In grave and obscure cases we are justified in diagnosing the more serious malady; or, at least, in warning them that more serious symptoms may appear in the future. Hysterical pyrosis is generally fugitive, hence a continuous fever for some days, favors a lesion. The coma due to hysteria must be diagnosed by the age, sex, absence of fever, ease or difficulty in deglutition, and the former and present history of the patient. Rapid

and the Cheyne-Stokes form of respiration may occur in hysteria, and especially in first attacks; but are present only in the last stages of grave organic diseases. In hysterical hemiplegia, the upper and lower extremities are seldom affected alike, and the face is never involved. Where there is contracture in hysteria, it is more marked, less resisting, and more irregular than in cases of true paralysis.

The skin and tendon reflexes and the electrical reactions are preserved in hysteria. In the paralysis due to hysteria, the wasting is due to disease. Hemi-anesthesia, without loss of motion, is almost always hysterical. Gowers says, "In conclusion, it must never be forgotten that many organic diseases of the brain produce hysteria. In any case apparently hysterical, the slightest symptom of organic disease is of absolute diagnostic significance, and until the absence of any symptoms of that kind, no other symptoms nor former history should be allowed to bias the observer's mind." In a large number of cases, attention to this rule will dispel all difficulty.

December 3rd, Dr. J. P. Rutherford, president, in the chair.

Drs. McKeough and Hall reported cases, showing the necessity for, and the value of post-mortem examinations. Dr. McKeough's case was that of a young man, æt. 26, who had always been healthy, till about six months before death. The last few months of his life, he complained of malaise, and vague pains through the body. Some weeks before his death he was confined to his bed, with what seemed to be a mild attack of typhoid fever. While convalescing from this, he got up from a lounge to do some little thing, and, on returning to the couch, complained of pain over the heart, turned blue, and in a few minutes was dead. The heart was examined the day before death, and no enlargement or lesion was discovered. The urine contained no albumen, but deposited copiously of urates. On post-mortem examination, the pericardium was found filled with partially clotted blood, and a rupture existed in the anterior wall of the right ventricle. The cavity of the right ventricle was normal in size, but its walls were as thin and friable as blotting-paper. His death was so entirely unexpected, that a post-mortem was asked for.

Dr. Hall's case was that of a baker, æt. 52, of temperate habits and free from any syphilitic taint. He applied for advice about four weeks before his death, complaining of not feeling well, of constipation, and a slight cough. At this time he was dull, and very slow in comprehending questions. Pulse rapid, wiry and irregular; temp. 97.5° F. Pupils contracted, but even and responsive to light. He grew gradually weaker, and on rising to walk, would stagger and have to steady himself before starting. Sensation was impaired, and the skin and tendon reflexes lost. The grip of the hand was weak, but both were equally strong. Respirations 10–14 per minute. The temperature rose to normal two days before death. On post-mortem examination, general softening of the entire brain was found, together with an abscess cavity in the right occipital lobe, and an excessive quantity of ventricular fluid.

The President reported two cases of poisoning, in a man and his wife, from eating head-cheese. The symptoms set in about three hours after partaking of it, and consisted of violent vomiting, followed by purging. The general opinion was that the meat had undergone some fermentative change, either before or after its manufacture.

Dr. Backus read a paper on Chronic Constipation, dealing with its causes, results, and treatment. All present joined in the discussion following it, and in the main agreed that more was to be hoped for from hygiene, diet, kneading of the abdomen, enemata, and regularity in going to stool, than from the continuous use of medicine.

MEDICO-CHIRURGICAL SOCIETY, MONTREAL.

Regular meeting held 3rd December, 1886. Dr. Cameron in the chair.

Dr. Stewart exhibited a patient with glandular enlargement or Hodgkins' disease; the blood was deteriorated, red corpuscles were about 1 to 20 of white. Treatment in many cases was successful. Billroth uses large doses of arsenic.

Dr. Bell said he had seen a number of these cases, and while some of them died in a few months, others lived for a long time; in some cases complete recovery has obtained.

Dr. Mills said recent investigation tended to

show that the red corpuscles were produced by the lymphatic glands; the case now spoken of tended to confirm this view.

Dr. A. L. Smith exhibited a case of psoriasis, where the ordinary treatment and chrysophanic acid failed to subdue it, but which rapidly yielded to anti-syphilitic treatment.

Dr. Shepherd exhibited a lad, about 18 years of age, who is the subject of leprosy; he is from Trinidad, where there is a great deal of leprosy, but none in his family. The disease first made its appearance about six years ago. There were well defined areas of anesthesia, especially on anterior aspect of both thighs. There were many tubercles, and the face and state of the fingers (especially) were markedly characteristic of the dread disease.

Dr. S. also showed specimens of cancer of the pylorus, and of a heart that extended three inches over the right side of the median line. The right auricle held ℥ xvij. and right ventricle ℥ x., while the left heart was but slightly dilated. The man was the subject of acute tuberculosis of the lungs and tubercular disease of kidneys. There was no valvular incompetency, and it was surmised that the enlargement was due to the lung trouble.

Dr. W. Gardner exhibited the ovaries of two patients, one aged 28, where one ovary was as large as a filbert and the other slightly enlarged. The other specimens were from a lady aged 38 years, the subject of pelvic distress and menorrhagia. Both ovaries were atrophied.

Dr. Trenholme was opposed to spaying in cases similar to the last mentioned, inasmuch as the patient was 38 years old, has lost much blood, and the functional activity of the ovaries had subsided. Patients who lose much blood at the menstrual periods, generally reach the climacteric period early. In a very similar case under his care, the patient ceased to menstruate before she was 40, had no more hemorrhages, and was now quite well.

Dr. Mills read a very interesting paper on the "Causation of heart-beat." It is not possible to give a very satisfactory summary of this paper. He regards intra-cardiac pressure as the chief factor of the cardiac action. Intra-cardiac nerve-cells are not essential to action of the heart, *e. g.*, in some of the lower grades of animal life. The heart's action is due to—1st. Inherent contractility of the muscular cell. 2nd. To intra-cardiac pressure. 3rd. To nutrition of the cells under control of the nerves. It has also been noted that the influence of the nerve force becomes more decided as the scale of organization attains a higher grade.

Dr. Shepherd gave a brief but interesting report of a case of suture of the ulnar nerve. It was dissected out from its cicatricial adhesions, the ends freshened and sutured together with most satisfactory results, sensation being restored in 24 hours and subsequently motion also.

Dr. Roddick related a case of suture of the sciatic nerve, some two years ago. The results in this case were also very satisfactory.

MICHIGAN STATE BOARD OF HEALTH.

A sanitary convention, under the auspices of the State Board of Health, was held Nov. 18 and 19. We give abstracts of a few of the papers.

Dr. J. P. Stoddard, of Muskegon, read a paper on "Injuries of Every-day Drug-taking." He said the habit of taking drugs and nostrums was beyond comprehension. It partly came from mothers dosing babies with soothing syrup, hive syrup, paregoric, worm lozenges, etc. Druggists and proprietory medicine companies distributed flaming bills, chromos and free samples of nostrums from house to house. The prevention was to educate the people in the injurious effects of drugs. There should be less medicine taken, and only on the advice of a physician after a careful diagnosis. A doctor was not capable of prescribing for himself when ill, much less the laity, who knew nothing of the action of drugs.

Dr. D. Inglis, of Detroit, read a paper entitled "Alcohol: What Effect has it as Food, Medicine, or Poison?" In closing his remarks on alcohol as a medicine, he said: I should like to produce the continually accumulating evidence of the positive harm caused by such indiscriminate use of all kinds of alcoholic drinks, bitters, and tonics. I should like, even more carefully, to define the conditions in which alcohol ought to be used than I have here done. I have only time to urge that we ought, in all cases to let alcoholic liquors be the last and not the first, remedy; that we ought to give alcohol in definite and known doses, and

only during such time as the drug is required, and to make it our business to see that its use is then suspended, just as we do in case of opium.

Dr. J. Avery, of Greenville, President, read a paper on the subject of "Pasteur and Protective Medicine." Dr. Avery told of Pasteur's parentage, his boyhood, his studies, and his first triumph as a chemist in discovering the left-handed polarizing tartaric acid. Pasteur, after this work, was made assistant professor of chemistry at Strasburg, where his first work was to prove the power of minute organisms to change or modify chemical affinity. He was then made dean of the faculty of science at Lille. Here he determined to devote a portion of his lectures to the study of fermentation. The prevailing theory of fermentation at this time, Pasteur could not accept. He experimented with milk, and discovered the lactic ferment. And soon after, in the same substance or some of its products, he found the butyric ferment. These two organisms he found to be entirely distinct. The lactic ferment required for its existence and multiplication, free oxygen or air; while the butyric ferment died when exposed to the atmosphere. Pasteur soon demonstrated that the special fermentation known as putrification is caused by a living organism belonging to the same class as the butyric ferment; and he also soon discovered the acetic acid ferment—the "*mycodermo aceti.*" Pasteur's next work was to demonstrate that spontaneous generation was a myth; and he then discovered the germ which caused so much havoc among the silk worms of France and other countries. He demonstrated that the disease among the silk worms was contagious, and gave practical directions for its prevention which restored the silk industry to Europe. This work led him to the great work of his life,—the development of the theory of the parasitic origin of communicable diseases; and in this effort he took the disease known as anthrax or splenic fever, which was decimating the flocks of all Europe. He put a drop of splenic fever blood into sterilized yeast water; in a few hours it swarmed with myriads of bacteria. A drop of the first cultivation he put into a second flask containing the same kind of liquid, and the bacteria multiplied as before. This process he repeated 15 or 20 times, and by this means freed the initial drop of blood from any substance it might have carried with it. And now, if a drop of this last cultivation is injected under the skin of a rabbit or a sheep, the animal dies with all the symptoms of idiopathic splenic fever." Pasteur had studied vaccination, and he now undertook to vaccinate for protection of animals against splenic fever. "Before the close of the year 1881, Pasteur had vaccinated 33,946 animals. In 1882, the number amounted to 399,102, including 47,000 oxen and 2,000 horses. In 1883, 100,000 were added to the list. In 1881, it was the common practice of farmers to vaccinate one-half of their herds and leave the other half unprotected It was found at the close of the year, that the loss in the protected sheep was ten times less than in the unprotected, being 1 in 740 as against 1 in 78. In cows and oxen it was 14 times less. * * * "In pursuing his investigations of the splenic fever disease, Pasteur made some curious and interesting discoveries which are of practical value to sanitarians and all who are interested in preventing the spread of communicable diseases. * * * He found that an antenuated virus that could cause no harm to a guinea pig a year or a month or even a week old, would kill one just born. The weakened microbe could multiply itself in the blood of one so young; and a few drops of this pig's blood would kill one still older, and so on until the full virulence of the microbe was restored. * * * Exposed to the air, these germs become weakened or take on the form of spores, in which condition they will remain viable for years, and float in the air as minute particles of dust, until they find lodgment in the proper media for their development and multiplication. What is true of these germs, may also be true of the germs of diphtheria, scarlet fever, small-pox, typhoid fever, and other communicable diseases. In localities where these diseases have prevailed as epidemics, is it not quite possible their attenuated and viable germs are constantly floating in the air, ready to resume their active form whenever and wherever the conditions of climate, of poverty, of wretchedness, of filth, and of bad air, present themselves?" Dr. Avery closed his paper with a discussion of Pasteur's work in inoculating for hydrophobia.

Selected Articles.

RAPID DILATATION OF THE CERVIX FOR DYSMENORRHŒA AND STERILITY.

BY DR GOODELL, PHILADELPHIA.

Our next patient is a woman, 28 years of age, who has been married some years and is sterile. Puberty occurred at the age of fourteen. She has always had dysmenorrhœa, the worst pain coming shortly before the flow begins. The flow is not very great and does not last longer than two days. We have here a case of stenosis or narrowing of the cervical canal. This is partly congenital and partly the result of anteflexion. The history of these cases is that when menstruation begins, the woman has pain. The womb gradually fills with blood, which cannot escape on account of the bend. As the fluid continues to accumulate in the uterus, the pain becomes excessive. The distention straightens the canal, and the blood escapes, when there is relief to the pain for a time. After the womb is empty, the cervix resumes its bent position, and the same process of filling and of emptying is again gone through with.

By far the best operation for the relief of this condition is forcible dilatation. Formerly, after its introduction by Dr. Marion Sims, to whom we owe pretty much all that we know in gynæcology (for he gave us the hints which have since been developed), what is termed the bloody operation was extensively employed. The loss of life following this operation was very great, and the death of a patient after an operation for the relief of a condition of this kind is a serious matter. Some years ago a lady came to me with severe dysmenorrhœa. She was an active and valuable member of society. When the menses came on she was compelled to go to bed and take large doses of opium, and for seven or ten days of each month she was unable to do anything. This condition preyed upon her constitution, and her health began to fail, and she was anxious to be cured. I performed the posterior incision. This was before we knew as much about septic diseases as we do now. In this case, septicæmia set in and the patient died on the ninth day. If the operation had not been performed, the lady might have lived indefinitely, so far as the dysmenorrhœa was concerned. This sad experience led me to give up the posterior incision. Then there began to appear in the journals reports of deaths following this operation. One physician stated that he knew of at least fifteen deaths following the posterior incision that had never been reported. After thoroughly considering the matter, it seemed to me that rapid dilitation would be a safer and better method. I do not mean to say that I am the author of the operation. It had been suggested before this by Ellenger, of Germany, but the instrument which he employed was too weak to accomplish the desired object. The great advantage of his instrument was the parallel action of the blades. I modified his instrument somewhat, and made one with stronger blades which could not feather and which were roughened to prevent slipping. That there was much dissatisfaction with the old operation is shown by a little experience a few years ago. I read a paper before one of our societies on this subject, and mentioned the name of the instrument maker who made my dilator. There was at once a great demand for the instrument, and the manufacturer told me that he had to keep three men at work for over a year simply making these dilators. From the names of those who had sent for the instruments, I am satisfied that their results had not been satisfactory with the old plan of treatment. This is an operation which I can confidently recommend. I have now operated over two hundred and fifty times, and I have never had a serious result follow. In a few cases there has been a local peritonitis, but not of a severe character.

I used to do this operation without antiseptic precautions. I now, however, always use antiseptics. The other day I was called upon to perform the operation rather unexpectedly, and there was no carbolic acid or bichloride at hand. I sent for some vinegar, and employed this as I would any other antiseptic, for it is an excellent antiseptic. I wash the vagina by injecting a 1-2000 solution of the bichloride of mercury. Before beginning the operation I introduce a suppository containing one grain of the aqueous extract of opium, and by the time that the effect of the ether has passed off, the opiate will be beginning to act. I now introduce the speculum and bring the os into view. I catch the cervix with a strong tenaculum and introduce the slender dilator, and dilate to an extent sufficient to permit the entrance of the larger instrument. The stronger dilator is now passed and its blades slowly separated. I shall, if possible dilate to the extent of one and one-fourth inches. It is rare that I do not dilate more than one inch. You may ask: "Is there not danger of tearing the cervix in this operation?" There is some danger of tearing the cervix a little, and I have done this occasionally, but not very frequently. In the bloody operation, the whole thickness of the cervix was cut through posteriorly. Here a little lateral tear is all that takes place, and I have never seen it of sufficient extent to require a suture.

I have now slowly dilated the cervix to the desired extent, but there has been no teariug. I shall next syringe the vagina again with the bichloride solution, and pass some of it into the dilated

canal. To-morrow we shall begin and use injections, twice a day, of a 1-4000 solution. The suppositories will be repeated every two hours, as long as there is any soreness. Two or three are usually all that are needed. The patient will be kept in bed as long as any soreness remains. Eight and forty hours in bed is, as a rule enough. She will be advised to do no laborious work for a week, in order to avoid all danger of peritonitis. Treating patients in this way, I have had no serious trouble. The most troublesome case that I have had was in the wife of a physician. She had a uterine fibroid, and when the uterus is the seat of a fibroid tumor, it is particularly vulnerable. She also suffered severely from dysmenorrhœa, for which I thoroughly dilated the canal. This was followed by very severe uterine colic. Under the use of large doses of asafœtida, this was overcome. By large doses, I mean nine grains three times a day, three three-grain pills being given three times a day. This is a harmless remedy, and it certainly has, when given in large dose, a beneficial effcet over nervous symptoms. It is of service in hysterical girls. If there are convulsions, overcome these with an emetic, and then saturate the system with asafœtida. The remedy cannot be given in an extemporaneous preparation on account of its taste, but should be given in sugar coated pills.

What is to prevent the cervical canal from shrinking and returning to its former condition, with a return of the dysmenorrhœa? The reason is, that the muscular fibres have been overstretched, and they will never return to their original condition, just as a rubber band which has been overstretched never returns to its former shortness. —*Polyclinic.*

SUBCUTANEOUS INJECTIONS OF MERCURY IN SYPHILIS.

MR. J. ASHLEY BLOXAM (*Lancet*, August 21, 1886) recently delivered a lecture on the excellent results which he had obtained at the Lock Hospital and elsewhere in the treatment of syphilis by intra-muscular injections of a solution of the perchloride of mercury. The solution for injection contains six grains of the perchloride to the ounce of distilled water, and should be made fresh for each *séance*. Since he had adopted this method, now a period of some eighteen months, upwards of fifteen hundred cases had been treated with the best results. The sore generally begins to heal very promptly after one or two injections, the secondary symptoms are markedly modified, and after a course of treatment extending over a year, more or less, the patient is enabled to discontinue his attendance. Towards the latter end of the course of treatment the injections may be given less frequently, and, as a general rule, not more than from eight to twelve grains of the perchloride are injected in all. It is undesirable to repeat the injections oftener than once a week, as otherwise salivation might be induced, and the quantity injected each time (one-third of a grain) is found to be quite sufficient until the next time. There are several advantages attending this method of exhibiting mercury. In the first instance, it is only necessary to see the patient once a week, when sufficient mercury is injected to last until the following week; secondly, salivation is not produced, as when the patient continued to take mercury for a whole week away from the supervision of his medical attendant; thirdly, the gastric derangements which are so apt to follow the administration of mercury by the mouth are by this means avoided; lastly, the ease and certainty of the administration, which enable the surgeon to do his own dispensing with a minimum of trouble. A little quinine is generally given during the course as a tonic, but no other form of mercury is administered.

The injection itself is a very simple operation, but certain rules have nevertheless to be observed in order to obviate any inconvenience which might otherwise result. An ordinary glass hypodermic syringe is used with a fine needle (the needle is apt to become very brittle from the action of the mercury on the steel, and requires to be replaced from time to time), containing twenty drops of the solution, equivalent to one-third of a grain of the perchloride. After filling the syringe, the needle is freed from adhering solutions by washing in order to avoid irritation in its track, and is then plunged deliberately into the muscular tissue of the buttock, selecting for this purpose the spot corresponding to the muscular mass of the glutei into the substance of which the injection is made. If this precaution be observed, no discomfort or abscess formation follows, the only solitary case in which this has occurred being attributable to the injection having been made into the areolar tissue over the trochanter The pain of the injection is but slight and soon passes off. It is desirable that the patient should not take active exercise immediately after the injection. as it has been noticed that blood may be effused at the point of injection, giving rise to the sensation of a severe bruise of the part, which lasts for several days. The same effect has followed the puncture of a large vessel, but in any case the result is only transient, and disappears after the lapse of a few days. If for any reason the buttock be objected to as the site of the operation, the injection may be made into the trapezius muscle at a point two inches above the superior angle of the scapula, but the injection into the buttock is attended with less inconvenience.

Mr. Bloxam mentioned that his own opinions were strongly in favor of syphilis being bacillar in

origin, thus accounting for the specific action of mercury in the treatment of the disease. In support of this view, he alluded to the remarkable researches of Messrs. Eve and Lingard, whom he had furnished with blood and chancrous tissue from patients at the Lock Hospital, the subjects of syphilis.—*Therap. Gazette.*

DIAGNOSIS OF SCROTAL TUMORS.

In sarcocele of the testicle the tumor is usually hard and resistant, heavy, often nodular and irregular; painful; grows slowly; dull or flat on percussion. The inguinal canal is empty; no impulse on coughing; bowels unaffected; irreducible; no auscultatory sounds. Simple sarcocele is chronic orchitis. Both the epididymis and body of the gland are affected. The cord is usually thickened. Abscess of the organ may occur. It is caused usually by an injury, followed by inflammatory deposits.

Tubercular sarcocele is met with most frequently in early manhood, and may occur in any constitution; in the strong and robust as well as the weak and cachetic; and although often associated with tubercularization of other organs, it is common enough to find the tuberculous nidus in the epididymis, not as a sequence of gonorrhœal inflammation or some slight injury followed by inflammatory infiltration—as was formerly believed—but as a coincident. The progress is slow and insidious. The gland at first moderately enlarges with little or no pain, the hypertrophy being especially marked in the globus major. Presently the outline of the tumor becomes craggy or nodulated, and circles around the testicle from behind forwards in the form of a crescent. After several months, the adventitious tissue exceeds in size the testicle proper, and then it begins to soften at points and one or more abscesses burst and discharge a thin shreddy pus. The vas deferens is greatly enlarged.

In syphilitic sarcocele or gummata, the history of the patient guides us in the diagnosis. Also, we find that the body of the gland is usually the seat of the infiltration which takes place in the connective tissue between the tubuli seminiferi, the epididymis undergoing little if any enlargement. The cord and vas deferens are unaffected. There is little or no tenderness, and the peculiar sensation elicited by squeezing a healthy testicle is absent. The tunica albuginea is very greatly thickened. Hydrocele is a frequent complication and tapping is often required to establish a diagnosis.

Cystic tumors of the testis closely resemble hydrocele, and differ chiefly in being opaque instead of translucent. Aspiration should be practised before pronouncing positively upon their character.

Cancer of the testicle primarily invades the body of the gland, and almost invariably assumes the encephaloid form. Most observers doubt the existence of other varieties of malignant disease in this organ. The development of the disease is rapid. The patient has a sensation of weight, pain and dragging in the testis, the scrotum becomes distended, reddish or purplish, and the superficial veins are seen to be enlarged. The skin adheres to the gland, ulceration occurs, fungus protrudes, the inguinal glands are secondarily involved, and the patient by this time presents the characteristic cancerous cachexy.—Dr. Steele, *Jour. Am. Med. Ass'n.*

CLASS-ROOM NOTES.

In subacute *pelvic peritonitis*, Prof. Parvin directed rest, iodide of potassium, blister to abdomen and persistent injections of hot water, if, after trial, they are found to be doing good.

Cocaine, in doses of gr. $\frac{1}{4}$ ter die, succeeded in controlling the *vomiting* of carcinoma of stomach after all other means had failed, in a case shown the class at Pennsylvania Hospital, by Dr. Meigs, recently.

"Never give opium or quinine to a person who has slight *aphasic symptoms;* it will tend to develop the disease."—Da Costa.

Injections of one per cent. solution of resorcin in *cystitis* have been found, by Prof. Bartholow, to be very beneficial, especially in those cases due to obstruction at the neck of the bladder by an enlarged prostate.

Besides the usual directions given as to diet, Prof. Da Costa prescribed the following, in *gastric ulcer*:—

℞—Argenti oxidi . . . . . gr. $\frac{1}{3}$
Ext. belladonnæ . . . . . gr. $\frac{1}{24}$
Ft. Pilula. Sig.—Ter die.

In dressing a *fractured olecranon*, Prof. Brinton, instead of placing the arm in complete extension, as commonly taught, found that, by allowing a slight degree of flexion, you render the patient much more comfortable, give him greater ease, and do not materially interfere with the result desired.

A case of *purpura*, the patient a child about three years old, Prof. Da Costa treated as follows:

℞—Ext. ergotæ fluid . . . . gtt. x.
Elixir simplicis,
Aquæ . . . . . āā q.s.—M.
Sig.—Ter die.

Dr. Neff, at a recent clinic, formulated the following comparatively simple treatment for *acute pleurisy*. Strap the affected side of the chest firmly with adhesive strips, having previously used dry cups over the part: thus you procure rest. Give

pulvis ipecac. et opii, in gr. iv doses, every four hours, for quiet and sleep; if more opiate be required, use morphine hypodermically.

Dr. Rex, in a case of *chronic bronchitis*, prescribed, at Jefferson Medical College Hospital, the following:—

℞—Ammon. chlorid. . . . . grs. x.
Vini ipecac. . . . . gtt. v.
Tinct. hyoscyam. . . . . gtt. x.
Syrup senegæ . . . . . ℥ xlv.
Mist. glycyr. comp., q.s. . ad f ʒ ij.—M.
Sig.—To be taken at first every two hours, but afterward reduce to three times daily.

—*Coll. and Clin. Rec.*

A CANNULA FOR TAPPING.

BY JOHN S. MILLER, M.D., PHILADELPHIA, PA.

The frequent occlusion of the cannula by intestine or omentum, in the operation of tapping, has suggested the device shown in the accompanying cut. The stoppage generally occurs when about a pint of fluid has been withdrawn, and various manœuvres are resorted to—such as the endeavor to float away the obstruction by changing the patient's position, or the dangerous one of introducing a probe through the cannula—and generally without success.

The device to which reference has been made is a smaller and longer cannula, introduced into that already in position, in case there is a cessation of flow. It is blunt, and provided with two long fenestra. In the latter there are springs, which expand and push away the obstruction on emerging from the original cannula, and which are so solidly soldered as to offer no danger of breaking off in the abdominal cavity.

In reply to the query whether or not the gut can become incarcerated and wounded in the springs, it may be stated that in several operations no such accident has occurred, nor were efforts successful to bring such about upon the *recent* cadaver.

The instrument can be used with any trocar and cannula above calibre 16, French.—*Med. Rec.*

THE INVENTOR OF SACCHARINE.—A representative of the *American Analyst* called upon Dr. Constantine Fahlberg, the inventor or discoverer of saccharine, the new coal tar sugar, and had a long talk with him about his new discovery.

"How did I discover saccharine?" he said. "Well, it was partly by accident and partly by study. I had worked a long time upon the compound radicals and substitution products of coal tar, and had made a number of scientific discoveries that are, so far as I know, of no commercial value. One evening I was so interested in my laboratory that I forgot about supper until quite late, and then rushed off for a meal without stopping to wash my hands. I sat down broke a piece of bread, and put it to my lips. It tasted unspeakably sweet. I did not ask why it was so, probably because I thought it was some cake or sweetmeat. I rinsed my mouth with water and dried my mustache with my napkin, when, to my surprise, the napkin tasted sweeter than the bread. Then I was puzzled. I again raised my goblet, and, as fortune would have it, applied my mouth where my fingers had touched it before. The water seemed syrup. It flashed upon me that I was the cause of the singular universal sweetness, and I accordingly tasted the end of my thumb, and found that it surpassed any confectionary I had ever eaten. I saw the whole thing at a glance. I had discovered or made some coal tar substance which out-sugared sugar. I dropped my dinner and ran back to the labortory. There, in my excitement, I tasted the contents of every beaker and evaporating dish on the table. Luckily for me none contained any corrossive or poisonous liquid.

"One of them contained an impure solution of saccharine. On this I worked then for weeks and months until I had determined its chemical composition, its characteristics and reactions, and the best modes of making it scientifically and commercially.

"When I first published my researches, some people laughed as if it were a scientific joke, others, of a more sceptical turn, doubted the discovery and the discoverer, and still others proclaimed the work as being of no practical value.

"When the public first saw saccharine, however, everything changed. The entire press, European and American, described me and my sugar in a way that may have been edifying, but was simply amusing to me. And then came letters. My mail has run as high as sixty a day. People wanting samples of saccharine, my autograph, or my opinions on chemical problems, desiring to become my partner, to buy my discovery, to be my agent, to enter my labortory, and the like.'

TREATMENT OF PAINFUL FISSURE OF THE ANUS.—J. T., a coachman, aged 56, had, for eighteen months, suffered such agonizing pain during defecation, that an enforced habit of constipation was established. From time to time he relieved

his bowels by enemata, first taking a large dose of laudanum to alleviate his sufferings. On examination with a speculum, I found a fissure, nearly an inch in length, with irregular edges and an indurated base. The sphincter was much hypertrophied, and contracted powerfully and spasmodically during the examination. I ordered a full dose of castor oil, with some rhubarb for its secondary astringent action, forbidding the customary laudanum. When this had operated, I had the bowel well washed out with an enema containing Condy's fluid. This done, I passed the speculum, and painted the fissure with a solution of chloride of zinc (twenty grains to one ounce); then introduced a piece of lint, smeared with boric ointment, the contraction of the sphincter keeping it in contact with the sore. The bowels were kept in check by pilula plumbi et opii. Liquid food only was allowed. The subsequent treatment consisted in the use of a powder (powdered boric acid, half a drachm; violet powder, one ounce), which was sprinkled freely on lint, and introduced into the anus to dry up any discharge, and the continued use of the boric ointment. By these means the fissure was entirely healed in six days, and there has been no return of the symptoms.

I have always found one application of chloride of zinc enough; it usually causes some smarting and uneasiness, but nothing more effectively purifies the ulcer or stimulates the reparative process. The introduction of cocaine robs the operative procedure of one drawback—the necessity of taking an anæsthetic; yet I may recommend a trial of this treatment, at least in the case of those who have an innate horror of anything approaching "cutting."—*Dr. Macgregor in Brit. Med. Jour.*

Stimulants as Retarding Digestion. — The extended consumption of one or the other of this class of substances points to the existence of some beneficial effect to be derived therefrom, although what this consists in it has been difficult to say, judging otherwise than subjectively. Sir William Roberts, of Manchester, has lately suggested an ingenious hypothesis, which offers a plausible explanation of their use. Man, in a state of nature, would derive his sustenance presumably from materials which, from their being raw, or at any rate imperfectly cooked, would be necessarily but slowly digested and assimilated. With civilized communities, on the contrary, everything is done with the view of facilitating digestion, by the removal of indigestible parts of the food, or by submitting them to processes which favor the action of the juices with which they are to be brought into contact. Under these circumstances, it is quite possible that digestion and assimilation may proceed at a speed not only unnecessary, but even disturbing, to the equilibrium of the organism, and provocative of waste. The employment of alcohol, tea, coffee, etc., would tend to correct this undesirable acceleration of the assimilative processes; for Sir W. Roberts has proved, by a series of carefully conducted experiments, that their effect is powerfully to retard the action of the various digestive ferments on the foods; and it may be that the instinctive sense of the benefit thereby derived lies at the root of the yearning of all civilized nations for such substances. Again, some condiment, such as common salt, is added to restore sapidity to articles from which the salts have been removed in the process of cooking; and, taken in excess, it only throws extra work on the organs of excretion.—*Brit. Med. Jour.*

Croupous Tonsillitis vs. Diphtheria. — In order to present more forcibly the points of contrast between this disease and true diphtheria, I have arranged them in the following form:

Croupous Tonsillitis.—1. Invasion abrupt. 2. Most marked general disturbance during the first two days; no tendency to asthenia. 3. Starts with a temperature of from 103° to 104.5° 4. Pulse full and rapid. 5. Membrane of yellowish color; edges sharply defined; limited to tonsils; does not bleed when detached; superficial; not very adherent; no tendency to reform after removal; appears early; does not spread. 6. Albuminuria rarely if ever present. 7. Reaches its height by the second day; by the fourth, the patient is generally convalescing. 8. Paralysis never follows as a sequela. 9. It is doubtful if it is ever contagious.

Diphtheria.—1. Much more often it is insidious. 2. Generally not much general disturbance before the third day, but after that marked tendency to asthenia. 3. Rarely high in the beginning, 100° to 101°, gradually rising till the fourth or fifth day. 4. When pulse rapid, it is feeble. 5. Color gray, sometimes greenish; shades off gradually; on uvula, soft palate, and pharynx, as well as the tonsils; bleeds readily, even without being detached; infiltrates the deeper tissues; adherent; strong tendency to reform after removal; may not be seen the first or even second day; spreads steadily. 6. Albuminuria rarely absent. 7. Most commonly does not reach its height before the fourth day. 8. Paralytic sequelæ quite common. 9. Frequently spreads by contagion.—Dr. Holt, in *New Jersey Med. Jour.*

The Use of Ice-water Enemata in the Treatment of Diarrhœa.—This means of treatment has frequently been adopted in cases of collapse occurring during the diarrhœa of young children at the Birmingham General Hospital. In cases outside of hospital practice, I have found this method not generally known. Being convinced of its utility, I am tempted to record my experience.

Ice should be dissolved in water, and from two

to three ounces injected. The immediate effect is commonly a quiet sleep and improvement in the collapsed condition. Subsequently the effect upon the diarrhœa is also good, and it will rarely be found necessary to repeat the enema. Internal treatment may often have to be continued, but I have no doubt that the life of many a collapsed child has been saved in this way. No reference is to be found in Ringer's Therapeutics to this method of treatment, but doubtless it is known to many of the older practitioners, though its disuse has led to its being unknown to the younger members of the profession. It appears probable that it acts by an astringent effect on the loaded vessels of the intestines, and so at the same time warming the exterior of the body, and diminishing the materials for the intestinal flux.

It has sometimes been found expedient to give a few drops of brandy about the time of injection; but in my experience, no depression or bad effects have resulted.—*Brit. Med. Jour.*

MILK BOILED AND UNBOILED.—Dr. M. Reichmann, in *Deutsche Medical Zeitung*, draws the following conclusions from a number of elaborate experiments as to the digestibility of milk in the human stomach:

1. Boiled milk leaves the healthy stomach more rapidly than an equal quantity of unboiled milk. 2. The digestion of boiled milk is more rapidly accomplished than that of unboiled milk. 3. The coagulation of unboiled milk in the stomach is complete in five minutes. 4. The coagulation is not caused by the acid of the gastric juice, but by the influence of a special ferment (milk-curdling ferment). 5. The acidity of the gastric juice is at first due almost solely to lactic acid, and, later in the process of digestion, to the presence of hydrochloric acid. 6. Hydrochloric acid first appears in perceptible amount forty-five minutes after the ingestion of half a pint of milk. 7. For the first hour and a quarter after the ingestion of milk, the acidity gradually increases, and then decreases until the milk has entirely left the stomach. 8. The curds in case of digestion of boiled milk are much softer than in the case of uncooked milk.

HEADACHES IN DIAGNOSIS.—1. When pain is located between the ears at the occiput, below the lambdoidal suture. The gastrodigestive apparatus, the automatic centres of life, and the sexual organs will be the seat of disturbance. 2. When pain is located in the region of the parietal bone, from the coronal to the lambdoidal suture, and from the squamous suture to the superior outline of the parietal eminence. The duodendum and small intestines will be the seats of disturbance. 3. When pain is located in the forehead, from the coronal suture to the superciliary ridges below, and within the temporal ridges on either side. The large intestines will be the seat of disturbance. 4. When pain is located below the superciliary ridges including upper eyelids, to the external angular processes on either side. The nasal passages and buccal cavity will be the seats of disturbance. 5. When pain is located in the temporal fossa, from the squamous suture to the zygoma below, and from the temporal ridge to the mastoid process. The brain and its meninges will be the seats of disturbance. 6. When pain is located at the vertex, from the coronal suture and two inches posterior to it in the median line, and two inches on either side of that extent. In the female, the uterus; and in the male. the bladder, will be the seat of disturbance.—*Medical World.*

ARSENIC IN THE TREATMENT OF ARTHRITIS DEFORMANS.—Two cases of anthritis deformans in which the symptoms were remarkably controlled during the exhibition of Fowler's Solution are described by Dr. Karl von Ruck. Both occurred in female subjects, the disease being in the one case strongly marked, in the other case attended by but moderate deformaties of the fingers. Four minims of Liquor Arsenicalis were given after each meal; and the treatment was persevered in for months, with visible benefit. The writer calls attention to the etiological factor in anthritis deformans, especially in some cases, which supports the theory of a central cause situated in the nervous system. The development of the disease after nursing a dear relative until the fatal termination of a tedious illness, with the attendant anxiety and grief, the symmetrical development and progress of the disease, and the trophic disturbances, all point, in his opinion, in this direction. He believes this theory to be further confirmed by the results obtained from arsenic, which, he holds, always produces its therapeutic effects by its action upon the nerves and nerve centres.—*Therap. Gaz.*

A SOLVENT FOR SORDES.—Dr. A. D. MacGregor speaks highly of boric acid as a topical application in the unhealthy condition in which we frequently find the mouth, tongue, and teeth in severe cases of typhoid fever. He says, in the *British Medical Journal*: The mouth is hot; the lips dry, cracked, and glued to the sordes-covered teeth by inspissated mucus and saliva; the tongue dry, or even glazed or hard, brown or black, crusted with a fetid fur. Under these circumstances a pigment containing boric acid (30 grains), chlorate of potassium (20 grains), lemon-juice (5 fluidrachms), and glycerine (three fluidrachms), yields very comforting results. When the teeth are well rubbed with this, the sordes quickly and easily bec mes detached; little harm will follow from the acid present. The boric acid attacks the masses of bacilli and bacteria, the chlorate of potassium cools and soothes the mucus membrane, the glycerine

and lemon-juice moisten the parts and aid the salivary secretion.—*Med. Rec.*

THE UTERINE APPENDAGES AGAIN.—The following appeared in *The Med. Press and Circular:* "A certain operator proposed to remove the "uterine appendages' from a patient under his care, and he asked a gentleman present if he would like to examine the patient, saying she had been suffering for years with an acute pain, that life was a burden, etc. The gentleman, struck by the full, round, rosy cheeks and red lips of the woman, first asked her how she slept at night. 'Oh, very well, thank you,' was the reply. 'You have no pain at night, then?' was the next question. 'Oh, no,' she answered. 'Have you pain all day long?' continued the questioner. 'Not all the day through,' she replied. 'Have you pain every day?' he went on. 'No, not every day,' was the answer. 'How often does the pain come on, then?' the gentleman continued. 'Oh, three or four days a month,' was the innocent reply, much to the amazement of the questioner. The would-be operator was heard to mutter something about 'getting any answer you like,' but it will be satisfactory to learn that the patient saved her ovaries on that occasion, at least.

URINE IN CHILDREN'S DISEASES.—Dr. Alexandra J. Eckert (*Vratch; Lond. Med. Rec.* Oct.), of St. Petersburg, states that she has made 1,500 analyses of urine in 104 children suffering from various diseases. Her conclusions are as follows: 1. All affections considerably disturbing nutrition of the child's system, and running their course in association with a high febrile state, give rise to albuminuria in an overwhelming majority of cases. 2. The characteristics of albuminuria are usually dependent upon the intensity of the morbid process, and the duration of the febrile period. 3. As a rule albumen rapidly disappears after abatement or cessation of fever. 4. Non-febrile affections, as well as those accompanied only by slight fleeting febrile movements, seldom give rise to albuminuria of any considerable degree; and when they cause albuminuria, it occurs only as a phenomenon of very short duration.

A REMARKABLE MOTHER.—A Boston physician was called out of a sound slumber the other night to answer the telephone. "Hello! what is it?" he asked, little pleased at the idea of leaving his comfortable bed. "Baby is crying, doctor, what shall I do?" came across the wire. "Oh! perhaps its a pin," suggested the doctor, recognizing the voice of a young mother, one of his patients. "No," was the reply, "I'm sure it can't be that." "Perhaps he has the colic," returned the doctor, with well-simulated solicitude. "No, I don't think so," replied the anxious mother, "he doesn't act that way." "Well, then, perhaps he is hungry," said the doctor, as a last resort. "Oh! I'll see," came across the wire; and then all was still. The doctor went back to bed and was soon asleep again. About half an hour afterwards he was again awakened by the violent ringing of the telephone bell. Jumping out of bed and placing the receiver to his ear, he was cheered by the following message: "You are right, doctor; baby was hungry."—*Chicago Living Church.*

HYDRASTIS CANADENSIS IN THE TREATMENT OF UTERINE CONGESTIONS, MENORRHAGIA, AND METRORRHAGIA.—J. Chéron (*La France Médicale*) writes enthusiastically with regard to the use of hydrastis in uterine disorders accompanied by congestions or hemorrhages. The dose is usually from fifteen to twenty drops of the tincture, given three or four times a day. A good formula is the following:

R—Tincturæ hydrastis,	. . .	iv.	grs.
Elixir,	. . . . .	xx.	grs.
Syrup,	. . . . .	xxx.	grs.
Aquæ destillatæ,	. . . .	cxx.	grs. M.

To be taken in eight doses in the course of two days. Or berberine phosphate or hydrastin hydrochlorate may be given in doses of two centigrammes; four pills a day, one at each time. Hydrastin may be given in ten-centigramme doses, in pill, several times daily. This medicament, so very useful in the cases just mentioned, is also a remarkable modifier of atonic dyspepsias and catarrh of the stomach, which is not to be despised when we contrast this action with that which is exerted upon the alimentary canal by the ergot of rye.

SUBNITRATE OF BISMUTH AS A DRESSING.—1. Subnitrate of bismuth possesses antiseptic properties at least equal to those of iodoform. 2. No poisonous effects are to be apprehended as in the employment of iodoform. 3. The subnitrate of bismuth being a chemically indifferent substance, does not irritate the wounds; secretion is diminished. 4. Its action is very prolonged, though not vigorous, so that the dressings do not require to be frequently changed, and rest is insured for the wounds. 5. There is no action at a distance, nor does any specific effect attach to it. 6. It does not afford protection against erysipelas and other wound diseases, at least no more than iodoform. 7. It is no disinfectant, but as an antiseptic it keeps the wounds pure. 8. All wounds capable of healing by first intention can do so when dressed with bismuth. 9. It also represents an excellent material for forming scabs under which epidermis can grow over the wound. Its use on granulating wounds has not, however, been sufficiently studied as yet.—*Annals of Surgery.*

DIPHTHERIA OF THE VAGINA.—Surgeon Jas. B. Clibborn, R.N. — Mrs. T., when attending her child, who was suffering from diphtheria, was scratched by him on her right wrist. Some days after a few isolated, inflamed vesicles appeared on the wrist, which implicated the glands at the bend of the elbow and axilla. There was no pyrexia, and the throat was not affected. The wrist soon healed under treatment, and the inflammation in the glands subsided, when a fresh crop of vesicles appeared around the nipples of both breasts; there was still no rise in temperature, and the patient complained of little inconvenience beyond weakness and general malaise. The latter crop of vesicles went away as rapidly as those on the wrist, but the patient complained of weakness, daily increasing; she also stated that there was a fetid discharge from the vagina. On making a vaginal examination the mucous membrane was found to be greatly inflamed, discharging pus and covered in parts with well-developed shreds of false membrane. The constitutional symptoms now rapidly developed, asthenia increased, and the patient suffered at times from delirium and delusions, and had one well-marked epileptiform convulsion. The urine contained a small quantity of albumen. The highest temperature taken only indicated 99·4°; the throat at no time presenting an inflamed appearance. The inflammation in the vagina daily increased, large shreds of false membrane, almost forming complete casts of the vagina, were discharged; asthenia was great; the pulse small and compressible; the pupils were frequently irregular, and responded feebly to light. About this period of the disease the patient (who was five months pregnant) was attacked with well marked labor pains, occurring at regular intervals. As it was considered that, should a miscarriage take place, the disease would extend to the uterus, with a probably fatal issue, very large doses of opium were given with a view of stopping the uterine contractions, which had the desired result after the patient had taken about five grains. Under treatment the discharge from the vagina became less and the development of false membrane decreased till about 10 days after its first appearance, when it had entirely disappeared. Convalescence rapidly took place, and she was subsequently delivered, of a living child with no bad results. *Treatment.*—Carbolic acid combined with quinine was given internally every three hours (each dose containing one minim carbolic acid, 10 minims glycerine, and one drachm tincture of quinine, in an ounce of water), the urine being carefully watched during its administration. Iodoform was applied locally with vaseline (a drachm to the ounce). When the vagina became affected, it was frequently washed out with a solution of permanganate of potash. Strips of lint soaked in iodoform and vaseline were introduced into the vagina and changed every few hours. Stimulants and strong liquid food were given in large quantities when the asthenia was great.—*Lancet,*

SORE NIPPLES.—Dr. Wilson, of Glasgow, recommends the following for sore nipples:

℞	Plumb. nitrat.	gr–x.xx.
	Glycerini	℥j.

M. Apply after suckling, the nipples being washed before the child is again put to the breast.

Dr. Playfair recommends:

℞	Sulphurous acid	½ oz.
	Glycerin of tannin	½ oz.
	Water	1 oz.

M. Apply after suckling.

Dr. Barnes recommends:

℞	Liquor plumbi	1 dr.
	Prepared calamine powder .	1 dr.
	Glycerini	1 dr.
M.	Vaseline	7 dr.

Qr. Comp. Med. Sci.

SOLIDIFIED LINIMENTS.—Any one who has had to apply a liquid liniment to the chest, or any other part of the body in an upright position, will have experienced the difficulty in keeping the liniment in the palm of the hand until it is fairly brought in contact with the affected part. It is a matter of surprise that in the last edition of the Pharmacopœia liniments are retained in their liquid form. There is no difficulty in solidifying most liniments by the addition of some gelatinizing material, so as to enable them to be smeared over the affected part with some approach to definiteness of quantity and to the great convenience of the patient. Solidified liniments are not only more convenient of application, but are far more easy of transport.—*Lancet.*

REMOVAL OF SUPERFLUOUS HAIRS BY ELECTROLYSIS.—Mr. Startin gives (*Lancet*) the following as his method in the above operation—The application of the needle electrode cannot be made without more or less pain varying much in different patients, no matter how the sponge electrode is applied. I then, after a prick or two of the needle electrode, brush over the part a 5 per cent. solution of hydrochlorate of cocaine, with good result, almost invariably deadening the pain. In one or two instances I have had an anæsthetic administered, but I find this is seldom necessary, as the pain is slight. The operation can now be proceeded with. The negative needle electrode is plunged into the root of the hair for about one-sixteenth of an inch, and the positive electrode sponge is applied in the immediate neighbourhood. The needle should be kept in for about the space of five seconds, then the sponge electrode should

be removed and afterwards the needle electrode. To know that the operation is effectual the needle should produce slight frothing of the tissues. The hair destroyed can now be easily epilated with an ordinary pair of dressing forceps, and it should come out without the slightest adhesion. This operation applies more especially to hairs that are noticeable to the naked eye. Fine downy hairs can always be destroyed by the application of a properly made depilatory. A slight inflammation of temporary character occurs for an hour or two after the operation in the destroyed follicle ; this can be controlled by the use of a soothing lotion. The operation, if carefully done with a battery in good working order, is invariably successful, especially if the hairs are few and of good size—from a quarter to half an inch long. If many hairs have to be removed, then several sittings will be required at intervals of about ten days. A hundred hairs can be removed at a sitting.

Rhurarb for Thread-Worms in Children.—A practical note on this subject is made in *The Practitioner*, by Sidney Martin, M.D., M.R.C.P., London. All physicians recognize that the complete cure of thread-worms in children is often very difficult. While the ordinary methods used, such as rectal injections of salt and water, infusion of quassia, and other remedies, do good for a time, yet they often fail to relieve the attendant symptom of "worms"—symptoms usually very irregular, and in some cases severe, in character. In many cases, though the irritation about the anus is relieved by injections, the irregularity of the bowels, and the disturbance of sleep, remain the same. This is probably due to the fact that the habitat of the worms is higher up in the large intestine, where no remedy introduced by the rectum can reach them. In many cases Dr. Martin has found that rhubarb in small doses brings away large numbers of worms, and at the same time regulates the bowels ; so that the use of injections may, in most cases, be dispensed with. The formula which he has found most useful is as follows, varying slightly with the age of the child :

R. Tincturæ rhei . . . . . m iij
Magnesii carbonatis . . . . gr. iij
Tincturæ zingiberis . . . . . m j
Aquam . . . . . ad ℥ j—Misce.

This is to be taken twice or three times daily, according to the effect on the bowels. Whether the rhubarb acts as a vermicide, or simply by "moving the worms on," he is unable to say.—*Virginia Med. Monthly.*

Arsenic in Hæmorrhagic Malarial Fever.—In the October number of the *Alabama Medical and Surgical Journal*—Dr. Benj. H. Riggs, of Selma, Ala., states that in his town there have recently been "quite a number" of cases of hæmorrhagic malarial fever, and nearly all recovered. He refers to three cases which came under his observation—all white—which recovered *without any quinine whatever ;* the main reliance was *arsenious acid.* He believes that arsenic arrests this blood-destroying process better than any other agent we have. In all of his cases, the hæmorrhage disappeared within twelve hours after beginning with arsenious acid, but the fever continued for some days in two of the cases, who were treated with an alkaline fever mixture and morphine hypodermically. The following is the formula he usually prescribes :

R. Acid arseniosi . . . . . gr. ¼.
Piperinæ . . . . . gr. ij.
Pulv. Doveri. . . . . gr. x.
Extract. hyoscyami . . . gr. v.

Mix. Make five capsules.—Sig. One every three hours, according to age and other circumstances.

Of course, be careful to prevent arsenical poisoning.

The Administration of Cod-liver Oil.—Dr. W. Washburn, of New York City, writes that he has long been in the habit of administering cod-liver oil in milk to both infants and adults. Milk is taken in the mouth and held there, and the spoon is first dipped in milk and then the oil is poured into it. Just as the oil is taken into the mouth the milk should be swallowed, and then another sip of milk taken. Children, if interrupted in nursing, readily swallow a teaspoonful of oil, and then proceed with nursing as if nothing had happened. The oily nature of the milk seems completely to shield the mucous membrane of the mouth and throat from contact with the cod-liver oil.—*Medical Record.*

A New Disinfecting Compound for purifying the atmosphere of the sick-room has just been presented to the Berlin Medical Society. Oils of rosemary, lavender, and thyme, in the proportion of 10, 2½, and 2½ parts respectively, are mixed with nitric acid in the proportion of 30 to 1½. The bottle should be shaken before using, and a sponge saturated with the compound and left to diffuse by evaporation. Simple as it is, the vapor of this compound is said to possess extraordinary properties in controlling the odors and effluvia of offensive and infectious disorders.—*Med. News.*

The *St. Louis Medical and Surgical Journal* says that for bruises there is nothing to compare with the tincture or a strong infusion of *capsicum annuum* mixed with an equal bulk of mucilage of gum arabic, and with the addition of a few drops of glycerine. This should be painted all over the bruised surface with a camel's hair pencil and allowed to dry on, a second or third coating being

applied as soon as the first is dry. If done immediately after the injury is inflicted this treatment will almost invariably prevent the blackening of the bruised tissue. The same remedy has no equal in rheumatic, sore or stiff neck.

CAUSATION OF PNEUMONIA.—Henry B. Baker, M.D., at a meeting of the Michigan State Board of Health, gives the result of his observations in regard to the causation of pneumonia. He finds that the percentage of cases gradually increases as the temperature lowers, this he attributes, not so much to the lower temperature, as to the fact that air at low temperatures contains less moisture. Thus a cubic foot of air saturated with the vapor of water at 0°F. contains half a Troy gr., at 70° eight, and at 98°, 18·69 gr. Dry air would thus constantly take up an extra amount of moisture from the lungs, and an increased quantity of fluids must pass from the blood into the air-cells and air-passages in order to keep them in the normal moist condition, and as these fluids contain salts, such as chloride of sodium, which would not pass off with the expired air, it follows that the chloride of sodium will remain in the lungs and may prove a source of irritation. The writer points out that chloride of sodium disappears from the urine during pneumonia, and has been found by Beale in his analyses of the lungs and sputa of pneumonic patients. He thinks the exudation of the albuminous constituents of the blood-serum is favored by the presence of chloride of sodium on the principle of exosmosis; since, if a mixed solution of albumen and salt be placed in a dyalyzing apparatus, the salt alone at first passes out leaving the albumen; but after the exterior liquid has become perceptibly saline, the albumen also begins to pass in appreciable quantity.

THE INFLUENCE OF FOREBODINGS IN DISEASE.—In the *Asclepiad*, January, 1886, Dr. B. W. Richardson, states that there are two kinds of forebodings—the fanciful and serious. False forebodings are presented by the persons fanciful and flighty natures, who are really found of contemplating risks, and who suggest anxiety one minute, and laugh at them a few minutes afterwards. These forebodings have no serious importance. True or serious forebodings emanate from persons who are firm and thoughtful, who as a rule keep to themselves what is on their minds until something like a crisis has been reached, when they come to a conclusion to which they adhere, by which they are much influenced. These forebodings are a critical disease and are bad, they have a direct effect on the physical powers; the heart's action is impaired, the digestion becomes affected, and there is a want of tone very much opposed to the restorative efforts. A wise plan is to take as little notice of these forebodings as possible, but to ridicule them is bad.

OTORRHŒA.—Dr. Brunetti of Venice, gives the case of a physician, aged forty years, who had suffered for thirty-five years from offensive otorrhœa. Tympanum was absent on both sides. The ossicles were present on both sides; on the left they were incompletely ankylosed. The auditory passage and middle ear were cleansed and iodoform and spirits vini recti employed; in two days the stench disappeared. For eleven days five-tenths per cent. solution sulphate zinc was used, then the iodoform again. In a month the vegetations in the tympanic cavity had disappeared; and patient was discharged with his hearing much improved.—*Med. Press.*

IODOL IN EAR DISEASES. — Dr. Stretter, who has used iodol, the new inodorous substitute for iodoform, in a large number of cases of ear disease, finds that in acute purulent inflammatory affections iodol applications rapidly produce marked benefit, but that in chronic inflammations of the middle ear it is generally quite useless, or at best no better than other more common methods of treatment.—*Lancet.*

PROF. ANTONIO CECI, of Genoa, has recently extirpated the spleen successfully. The patient was a servant girl, seventeen years of age. The spleen was enlarged to such an extent that it constituted one-fifteenth the entire weight of the body. This is the seventh splenectomy performed in Italy, and is the second successful case.—*Med. Herald.*

TREATMENT OF OZŒNA.—Dr. Malacrida, after cleansing the nostrils with a solution of chloride of sodium and drying the mucous membrane with pledgets of absorbent cotton, introduces a bit of cotton moistened with a few drops of the essential oil of turpentine. In a number of cases in which this method was employed, the disagreeable odor was almost immediately destroyed, and a permanent cure was obtained in less than a month.—*Med. Herald.*

CHARCOAL AND CAMPHOR IN CHRONIC ULCER.—A mixture of equal parts of camphor and animal charcoal is recommended by Barbocci as an application to prevent the offensive odor and remove the pain of old excavated ulcers. The camphor acts as a disinfectant, and the charcoal absorbs and destroys the offensive odors.—*British Medical Journal.*

SIR THOMAS WATSON AND SIR JAMES PAGET.—At the recent banquet of the British Medical Benevolent Fund, Dr. Broadbent, in proposing the health of the Chairman, Sir James Paget, applied to him the words Sir James himself had used of Sir Thomas Watson: "His knowledge was so vast, his goodness so great, and his example so elevating, that we all wished he might spend part of his immortality on earth."

Psoas Abscess; When and How to Open it.—At a recent meeting of the British Medical Association, Mr. Edmund Owen read a paper on the above subject. Mr. Owen said there was no disease the treatment of which had derived a greater impetus from the introduction of antiseptics than psoas abscess. By antiseptics he did not mean the use of the spray. The spray was now cooling down in more senses than one, and the surgeon did not now have to look through a cloud of carbolic vapor at his patient. By the use of antiseptics, he meant antiseptics as used by the great masters in surgery, whether by Tait, Gamgee, Savory, or Lister. Twenty years ago every surgeon preferred to leave a psoas abscess alone, so long as it remained unopened. Stanley, writing forty years ago, said a psoas abscess might disappear. Could it? Mr. Owen said that in an extensive out-patient experience, extending over years, he had only seen one case in which, after a fusiform tumor had been detected ascending along the iliac fossa, he had seen it disappear, Aspiration was useless, for it refilled. When evacuation of the abscess was performed, it should be done thoroughly, and no useless temporizing measures made use of. During delay the pus would be burrowing out for itself an extensive ramifying cavity. A free anterior and posterior opening should be made, and the wound thoroughly drained. The sac should be washed out with a warm antiseptic lotion, and a drainage tube the size of a cedar pencil passed through. The wound should be covered with sublimate gauze, then some oakum placed over it and the dressings changed as seldom as possible. He had employed as the antiseptic lotion a warm solution of corrosive sublimate (1 in 1,000). He should, however, in future, discard the use of the sublimate, as he had had a case which died in four hours with black urine, due, he believed, to the absorption of the sublimate. Mr. Owen, in concluding, summed up his conclusions as follows:

1. Spontaneous absorption of psoas abscess is impracticable. Sooner or later it must be evacuated, either by nature or art, and the advantage is on the side of art.

2. The sac should be opened both in front and at the back, and irrigated. For a small abscess a single opening at the back might suffice.

3. Antiseptics should be employed.

4. The operator should bear in mind that pus might collect on the opposite side after evacuation of the abscess. If any rise of temperature take place, a second abscess should be suspected, and, if found, evacuated at once. Bilateral abscesses should be attacked simultaneously, as their cavities frequently communicate. In reply to a query from a member as to the source of his method, Mr. Owen replied that it was neither English, French, tch, nor Italian, but Welsh, thereby signifying that the idea was his own, and that he had not borrowed it from any one.—*Medical Record.*

Night Palsy.—Dr. W. E. Stevenson ("Practitioner"), contributes a short article on a special form of numbness of the extremities occurring, for the most part, during the night, and to which Weir Mitchell has given the name of night palsy. Dr. Ormerod's description is quoted as follows: "The symptoms are remarkably definite in character. They occur in women, usually about the climacteric period, and begin in the night. On waking, the patient has a feeling in the hands and arms (commonly on both sides) of numbness, deadness, pins-and-needles; sometimes there is actual pain, severe enough to wake her. There is also loss of power, the hands and arms become useless, and she cannot hold things. This may so far predominate that the patient comes to be treated for a supposed paralysis. Sometimes also the patients say that the hands swell, the veins swell, etc., at the time. The symptoms pass off in a little time, and rubbing suggests itself as a natural remedy. But occasionally they manifest themselves in the day time also, and then principally when the patient sets about her ordinary work—washing, scrubbing, needlework, etc." The author has had several cases of the affection, and his observations agree, in the main, with the foregoing description. Though mostly seen in women at or near the climacteric age, it is occasionally met with in men, in whom it is likely to be more severe and obstinate. Some attribute it to anæmia, others to gastric disturbances. All of the author's patients recovered with rest, bromide of potassium, and galvanism.—*N. Y. Med. Jour.*

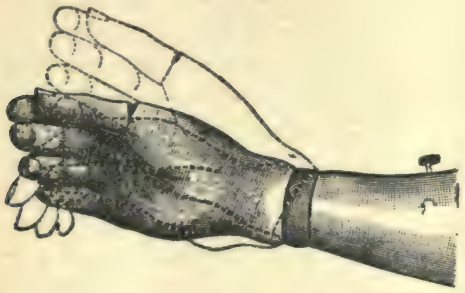
Correlation of Tonsils and Genitals.—It has long been held by certain writers that the tonsils and genitals are in some way correlated. An opinion prevails that wasting of the testes may follow excision of these organs. At a recent meeting of the Hunterian Society, of London, Mr. Pierce Gould presented a man aged twenty-seven with genital absence of the tonsils, in whom the genitals were imperfectly developed and sexual desire absent. The man had a femine appearance, and had neither beard nor moustache. The tonsils were represented by two small nodules between the pillars of the fauces. Mr. Gould held that there was no evidence for the popular belief in England that excision of the tonsils before puberty influenced virility, and he referred to a practice in Zanzibar of removing the tonsils from all male infants, which seems, in that country at any rate, to be without influence on the development of the testicles. It would be interesting to know of any genuine cases of failure of development of the sexual organs in persons who had been subjected to tonsillotomy. The tonsils were found normal

in two women in whom the ovaries were congenitally absent. It was the general opinion of those who took part in the discussion on Mr. Gould's case, that a relationship between the two organs had not been established.

Tonsillitis occurs with special frequency in adolescents, and in a recent Aberdeen thesis on this subject by Haig Brown, the author refers, without details, however, to the occasional atrophy of one testicle after removal of the corresponding tonsil.

An interesting point bearing on this question is the frequency with which acute tonsillitis occurs in newly married people. We have known the honeymoon interrupted in several instances by this painful affection, to which also Shepherd, of Montreal, has called attention, suggesting that it bears out the old idea of the intimate association of the tonsils with the genitals.—*Med. News.*

ARTIFICIAL HAND.—The accompanying cut represents an artificial arm with ball-and-socket wrist-joint, recently invented and manufactured by Geo. R. Fuller, successor to the late Dr. Bly, of Rochester, N.Y.



The improvement admits of placing the artificial hand in any position that can be attained with the natural hand, and is an important advance in the progress of prosthesis.

NEW OPERATION FOR FISTULA IN ANO.—Dr. Jos. M. Matthews, in *Progress*, advocates dilatation with laminaria tents of the fistulous tract, and subsequent bi-lateral division of its pyogenic membrane with Otis's improved urethratome. He claims to have had good results. In fact he succeeded in curing such cases by this operation where the other means had failed.

SPEEDY CURE FOR GONORRHŒA.—Dr. Chas. C. Edson, *Chicago Medical Times*:—In reply to your question column I will give my three-day cure for gonorrhœa. R. Oil sandal wood ; fl. ex. quillea sapo, aa ʒ iv. M. and shake. Add glycerine ; aqua cinnamon, aa ʒ iij. M. Sig.—Teaspoonful four times a day.

R. Morphia sulph., gr. iii ; muriate berberina, gr. x ; zinci sulphas, gr. viii ; bismuth sub. nit., ʒ iv ; aqua rosa, ʒ iv. M Sig.—inject a small amount after each micturition. Keep the glans penis well covered with cloth so as to prevent the discharge from soiling the linen. This is a very necessary precaution for a speedy cure, as matter upon the clothing reinoculates and continues the disease indefinitely.

NITRATE OF SILVER STAIN.—Dip the fingers into a strong solution of cupric chloride. In about a minute the silver will be converted into chloride, and may then be washed off with hyposulphite of soda solution.—*Chemist and Druggist.*

NÆVUS.—Dr. W. J. Beatty (*British Medical Journal*) has cured eight cases of nævus, perfectly and painlessly, by painting the affected spot night and morning with liquor arsenicalis until ulceration took place. A cure is affected in from three to five weeks.

For acute rhinitis in its incipient stages, of all the remedies tried by Dr. Sajous, the following has given the best results. In the doctor's words, "It acts like magic":

R Morphinæ acetat . . . . gr. iv..
Bismuthi subnit. . . . ,
Pulv. talc. . . . . aa ʒ j. M.
Fiant chartæ, xxx.
Sig.—Use as a snuff.

Dr. Sajous states that this will check a very bad cold, or coryza, sometimes with only one sniff of the powder.—*Med. Summary.*

CHILDREN are being subjected to rather heroic treatment in some sections this summer, if the advice of some of the writers in the medical journals is being followed. One of these, for instance, advises that: "if the baby does not thrive on fresh milk it should be boiled." Another, in an article on nursing bottles, says: "When the baby is done sucking it should be unscrewed and hung up."—*Med. Age.*

CITRIC ACID VS. NEOPLASMS.—Because of its destructive action upon morbid cells and indifference to healthy normal cells, this acid has been employed topically to destroy new growths till healthy tissue was reached, or has been injected at the edge of new growth to limit their growth previous to operation. It has also been douched over the wound after operation as a prophylactic measure.

MUST BE THE RIGHT PLACE.—Tramp.—"Is this a lying-in hospital, mister?"

Janitor.—"Yes, this is a lying-in hospital."

Tramp.—"Then I guess its the right place for me, for I've been lying out these three nights."—*Med. and Surg. Reporter.*

THE CANADA LANCET.

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DIPHTHERIA.

The prevalence of this dreaded disease during the latter months of 1886 demands attention. Although nothing new has recently been recorded concerning it, yet were each physician to relate his experience, his method of treatment, and his percentage of success or failure, some advance might be made, not only in treatment, but in our knowledge of its etiology and prevention. Science has not yet furnished us a specific remedy, although many agents have been tried, and various methods adopted, which have been more or less successful in restraining its ravages, since Bretonneau, in 1826, first drew special attention to it, and named it Diphtheria. Not that it was unknown prior to his celebrated treatise, for it can be traced back, under various cognomens, to the time of Homer. Macrobius speaks of a virulent epidemic in Rome, A.D. 340. Aretins describes it, under the name of Egyptian or Syriac ulcer. Numerous epidemics are recorded, to which space forbids reference. Briefly, it has prevailed more or less from time immemorial, occasionally becoming so virulent, that it was denominated "the plague," and swept off thousands in various localities. We purpose making a very brief synopsis of what is, to some extent, settled, regarding it, and outlining the treatment which has generally proved most successful, and is usually adopted at the present time.

It is an acute specific contagious disease, with a period of incubation of from three to eight days, and may occur in any locality and under every condition. It attacks all classes, rich and poor, well-nourished and ill-nourished, under any and every hygienic environment. Bad hygienic conditions augment its virulence, rendering it more fatal; but good hygienic surroundings do not afford exemption. Temperature has little or no influence, although it is usually more prevalent in autumn and winter than spring and summer. Geological formation, conditions of the earth's surface, hill or valley, moist or dry, hot or cold climates, have little if any effect on its prevalence. Diathesis does not appear to have any influence, although some think struma a predisposing cause. It is a constitutional disease, with local manifestations. Children are most liable, although adults are by no means exempt. Nursing children are seldom attacked. One attack does not protect, but subsequent attacks are usually milder. The duration of the attack is from ten to fifteen days, and indications of recovery or fatality are apparent in about seven days. Public institutions are said to be singularly free from attacks, and some races of people to be remarkably exempt, as well as some localities, even in the immediate neighborhood of those virulently attacked. It is often followed by insidious pneumonia, albuminuria, depression, nervous debility, paralysis (local and general), impairment of vision, dulness of hearing, etc. These may follow mild as well as severe attacks, immediately, or not for several weeks subsequent to apparent recovery. Of those affected by paralysis, only about 10% prove fatal.

Treatment, after innumerable experiments, has generally settled down to—1st. Best possible hygienic conditions, unlimited fresh air, saturated with moisture and antiseptics, such as sulphurous acid vapor, carbolic acid, etc.

2nd. Local treatment. Tr. ferri chloridi, with pot. chlorat., diluted with water; carbolic acid, with glycerine; or, Tr. iodi., frequently applied, has each many advocates. But we believe the first is most reliable and most generally used by men of large experience. It is not now considered necessary to apply topical remedies so strong as to injure the mucus membrane of the mouth, nor to use any force to remove the membranous exudation. When the nasal cavities are affected, syringing them with one of the above remedies, in dilute form, must frequently be resorted to; inha-

lation of steam containing carbolic acid is important, especially when the membranous exudation has extended into the larynx and trachea. Externally, poultices, Tr. iodine, spts. terebinth, etc., have usually been thought advantageous.

3rd. Constitutional treatment is sustaining from the beginning. Depressant remedies are inadmissible at any period. Stimulants are very important in severe attacks, when prostration is severe from the effects of an excess of poison in the blood. Wine, spirits, amm. carb., etc., should be administered *ad. lib.* When pneumonitis sepervenes, poultices to the chest and between the shoulders are essentials, with stimulant expectorants. Of internal remedies, a mild purgative should be administered at first; subsequently, little if any purgative medication is advisable. Internally Tr. ferri mur., with pot. chlorat., administered frequently, is chiefly relied on, by all. The Tr, ferri has the effect of preventing or removing the attendant dyscrasia of the blood, in this as well as other diseases, to a greater extent than any other known remedy; and the chlorate is a tonic and febrifuge of no mean power; while both have a specific action on the local disease, and are applied every time it is swallowed. We are convinced, by a somewhat extended experience, that calomel, in small and frequent doses, is also of much benefit, and especially when the membrane extends into the trachea. We are aware that many physicians in the past have condemned it as being useless, if not positively injurious, yet we know that the practice of administering it is gaining ground, notwithstanding the prejudice existing against it. Where suffocation is threatened, and all other remedies have failed, tracheotomy as a last resource should be performed, with the faint probability of rescuing the sufferer from otherwise certain death. When it is followed by paralysis, strychnia and electricity are the remedies chiefly relied on, while massage is important, as a substitute for the necessary exercise of the paralyzed muscles. Nourishing diet, tonics, reconstructive remedies, are all-important in every case, not only during the attack, but for some weeks subsequently.

MEDICAL REGISTRATION IN ONTARIO.

In another column will be found a letter on the above subject which is very timely. The question as to registration is certainly a burning one, with the hundreds of students now in our colleges, who are, we believe, memorializing the Council for better terms than those proposed, of insisting on every practitioner taking the Council examinations. We may say that we are entirely in accord with the sentiments expressed by our correspondent. It seems absolutely absurd, in consideration of the action spoken of by our correspondent by the authorities in Britain, as also in our own Provinces of Manitoba and Quebec in regard to reciprocity, that our Council should undertake to build a wall around our little medical institution in Ontario, through which none may enter except by the door of Council examinations and Council fees. There has long existed a feeling that certain members of the Council look askance at practitioners who have registered here under old country licenses, even though such practitioners may have spent some time in attendance upon one or more of the great hospitals of London or Edinburgh. The old cry of "evading our laws," crops out from these men continually, though, as we have previously pointed out, laws must be made before they can be evaded. Surely a graduate of one of our Universities who spends say a year under the instruction of the best men in London and Edinburgh, and who secures a license to practice from one of the Colleges there, is a better man than he would have been had he simply passed the Council here. Why then should we insist on so close a corporation in medical matters, unless, as has been hinted by our correspondent, the fees are the object. Do the members of our Council wish to exclude British licentiates on the ground that their scientific or professional standing is lower than ours? If they do so, not only the members of the Council but the profession at large in Ontario may well become the laughing-stock of medical men wherever our name is heard. We hope the letter of D. E J. may be followed by others showing the position held by the profession in various parts of the Province, on this very important question.

TAKING BLOOD DIRECTLY FROM THE LIVER.

Dr. Haley read a paper before the last British Medical Association, in which, among other therapeutical procedures for the relief of congestion of

the liver, he deals with the removing of blood directly from the liver by means of a trocar and cannula.

This process he calls "hepatic phlebotomy." He first undertook to show that it is impossible to draw blood directly from the liver by means of cups or leeches, and that as compared with the withdrawal of an equal amount of blood from the arm, the leeching or cupping process is, if anything, inferior. Dr. Haley has long believed that the direct withdrawal of blood would be followed by great advantages in the case of hepatic engorgement, and at last succeeded in obtaining the consent of a patient and friends to the operation, which briefly was as follows: The patient was anæsthetized, and the liver was pierced in its upper part from right to left with an eight-inch trocar of the diameter of between a number 2 and 3 sized English catheter. The trocar was run in up to the hilt in the hope that in its passage it might wound sufficient vessels to yield a full stream of blood. On withdrawing the cannula an inch or two, a full stream flowed from its free orifice. Twenty ounces of blood were abstracted, a two-inch square piece of sticking-plaster applied over the external wound, and the abdomen tightly bandaged in order to bring the abdominal wall into close contact with the capsule of the liver to prevent any chance of hemorrhage. The liver, from the day of the operation, decreased in size, and by means of copaiba, resin and tapping, the ascites and anasarca which had existed disappeared, and the patient made a complete recovery from what Dr. Haley and Dr. Walker had considered a perfectly hopeless state.

It would appear from this that the liver may be safely punctured, and with great benefit to the patient. The operation certainly commends itself, and if future experience prove it to be safe, we shall no doubt soon have it established as one of the standard and remedial measures for chronic congestive hypertrophy and engorgement of the liver.

ELECTRICITY IN MEDICINE.—The large extent to which electricity is now used in the various departments of medicine has been the means of inducing a good many persons who have no special qualification for the work, to engage in the manufacture of instruments. Some of those offered for sale are really not worth using, and cause only vexatious disapointment when purchased and tried. We speak from experience when we say that the instruments manufactured by the Kidder Manufacturing Co., of New York, are without doubt the best in the market. The "Jerome Kidder" batteries are reliable and valuable instruments, and the well-known tip battery, the invention of Dr. Jerome Kidder, for convenience and practical utility has never been surpassed. The above-named batteries have received the highest endorsement of scientific authorities, and we heartily commend them to the attention of our readers.

OVARIOTOMY.—In a recent clinical lecture on Ovariotomy at the Hotel Dieu Hospital, Montreal, Dr. Hingston constrasted his earlier operations of twenty-five years ago with his later ones of the past couple of years. In the earlier operations the mortality was large—not often getting over three or four recoveries without a break—while lately he had reached sixteen recoveries without a break. And yet selected cases for the last sixteen recoveries embraced two removals of the uterus and all the appendages. Dr. Hingston attributed this decreasing ratio of mortality to better trained assistants, and hence less waste of time; to a more thorough cleasing of the wound before closing; and to a better system of nursing.

"NEWSPAPER ADVERTISING" AGAIN.—We regret to have to return to this unsavory subject again this month. The "Brockville Recorder" and the "Mitchell Recorder" of December 9 and 10, respectively, contain paragraphs which are, in the eyes of the profession, damaging to the medical men concerned. Paragraphs of the kind complained of may now and then appear in the papers, much to the disgust of the medical men concerned, but when they are repeated again and again, the parties so advertised must be held responsible if they do not put a stop to them.

DIPHTHERIA.—The *St. Louis Med. and Surg. Jour.* puts the case well in the following: "We venture to say that nine-tenths of the cases of so-called 'diphtheria' of which one hears, not only in St. Louis, but elsewhere, are simply follicular tonsillitis. We recently heard one young M.D.,

the down upon whose lip resembles the bloom of a peach, tell a young lady in an Olive Street car, that he had attended thirty-six cases of diphtheria during the epidemic, and *saved them all.* True diphtheria is a disease that kills—not every time, but in such a large proportion of cases that the physician who knows his business has a dread and respect for it scarcely second to that accorded to cholera." This will strike a responsive chord in the breasts of many honest physicians who live in the neighborhood of these fortunate practitioners who "cure the diphtheria."

THE PULSE IN HYPERTROPHY, PREGNANCY AND DURING MENSTRUATION.—The *St. Louis Med. and Surg. Jour.* states, and gives its authority for stating, that the rate of the pulse is invariable in all positions of the body in hypertrophy, and during pregnancy and menstruation. This last will be interesting to most readers, though it has been known for some time that position affects the rate of the pulse but little in the two former cases. It is a matter which may be easily proved by anyone, and no doubt we shall soon have theories enough to account for the fact, if it prove to be a fact.

DURATION OF INFECTIVENESS IN SCARLET FEVER.—Dr. Ashby (*Br. Med. Jour.*) summarizes a paper on the above subject as follows:

1. If desquamation is complete, convalescent scarlet fever patients may be discharged at the end of the 6th week, though, in order to secure absolute immunity from infection it is wiser to delay until the end of the eighth.

2. Cases complicated with nephritis, empyema, otitis, or glandular abscesses should be detained until the cure is complete.

3. That while it is important that desquamation should be as complete as possible, the detention of the patient beyond the 8th week, in order that the epidermis should be removed upon the soles of the feet, etc., is unnecessary.

TYMPANITES IN HYSTERIA—Professor Talma relates some cases of tympanites in hysteria. He believed it due to contraction of the diaphragm. The size of the abdomen was considerably decreased during sleep, and under chloroform it became normal. Hiccough was a cause of great distress in one case, it being greatly increased whenever any of the students approached her.

PRURITUS VULVÆ.—The N. Y. *Med. Jour.* gives the following as an application for pruritus vulvæ:

℞—Glycerite of starch	30 parts.
Zinc oxide	6 „
Potassium bromide	10 „
Ext. of Indian hemp . . .	2 „

Precede the application by a hot hip-bath.

ACNE.—Ringer recommends the following lotion as very useful in that form of acne common in young women at the menstrual period:

℞—Sulphur	ʒ j.
Glycerini	f ʒ j.
Aq.	℥ x.—M.

Sig.—Apply twice or thrice daily.

ACUTE CONJUNCTIVITIS.—In this disease the following solution is a favorite one of Dr. Foxe's:

℞ Acid. boric., ...	gr. xij
Zinci chlorid., ...	gr. iij
Aquæ camph., ...	
Aquæ destillat., āā . . .	f ʒij

M. Sig.—Use as lotion for eyes.

CHRONIC DYSENTERY. — Dr. Blomfield speaks highly (*Lancet*) of the efficacy of the following injection in chronic dysentery. After washing out the rectum with a pint and a half of water at 90° F. he injects two ounces by measure of the following: Quiniæ bisulph. gr. x; tinct. camph. co., ʒiv; decoct. amyli ad ℥ij. If this be rejected it may be repeated in an hour to two. These injections given night and morning soon improve the patient's condition.

A SOLVENT FOR SORDES.—Dr. MacGregor gives (*Ed. Med. Jour.*) the following as a solvent for sordes: Boric acid, thirty grains, chlorate of potassium, twenty grains, lemon juice, five fluid drachms, and glycerine, three fluid drachms, yields very comforting results. When the teeth are well rubbed with this, the sordes quickly and easily become detached; little harm will follow from the acid present. The boric acid attacks the masses of bacilli and bacteria, the chlorate of potassium cools and soothes the mucous membrane, the glycerine and lemon juice moisten the parts and aid the salivary secretion."

Oil of Turpentine in Painful Intestinal Affections in Children.—Dr. Bedford Brown (*Jour. Am. Med. Asso'n.*), says that the oil of turpentine has a very soothing action on the irritated and inflamed mucous membrane, and checks the rapid exfoliation of epithelium which goes on during the inflammatory process. It is not only sedative in its action, but also acts as an antiferment, deodorant and antiseptic. He recommends it in the dyspepsia of young children brought up by hand, accompanied with severe pain with either constipation or diarrhœa. It is useful also in enteritis, dysentery, and intestinal catarrh. He recommends that it be combined with belladonna and alkali, or with simple peppermint. Dose for a child of one year 2 minims.

The *Med. Summary* gives the following as a good tupentine emulsion :

℞	Oil of turpentine . .	2 fl. ounces.
	White of Egg . . .	2 fl. ounces.
	Glycerine	4 fl. ounces.
	Syrup	4 fl. ounces.
	Water	4 fl. ounces.

Mix the white of egg and glycerine together, add the oil of turpentine, and shake thoroughly ; then add the syrup, and lastly the water, shaking them well together. This makes a nice emulsion and is easily made and as permanent as any turpentine emulsion. A teaspoonful dose will contain about 8 minims of turpentine.

Fresh Milk in Acute Arsenical Poisoning.—Dr. Jones (*Virginia Med. Month.*), says fresh milk, by enclosing the poison in its coogner and chus, acts as a mechanical antidote. He instances a family of seven persons poisoned by arsenious acid, by the exhibition in large quantities of this simple remedy.

Sciatica.—Dr. Da Costa frequently prescribes :

℞	Olei ganeth.		
	Olei trebinth, ...	*aa*	ʒ iv
	Syr. acaciæ, ...		℥ ii
	Aq. cassiæ, ...	*ad*	℥iij—M

S.—℈1 three or four times a day.

Cimicifuga in Chorea.—The *Boston Med. and Surg. Jour.* gives the names of several eminent men who speak highly of the use of cimicifuga in chorea. It acts speedily and thoroughly, but requires to be administered in full doses, such as "develop its specific effects, particularly vertigo and confusion of sight."

Cocaine in Labor.—Dr. Hertzhorne recommends (*Lancet*) the use of a compound of six parts of cocaine, twenty-four of vaseline and twenty of glycerine, to be applied to the parturient canal during the second stage of labor for the purpose of producing anæsthesia of the parts, and so vastly lessening the pain incident to that stage.

Hypodermic Administration of Strychnia.—Dr. Austie says the full effects of this drug are rapidly developed when administered hypodermically. He proposes a solution of the sulphate, grs. ij. ad aq. dest. ℥j., of which the proper commencing dose is ♏ij. (gr. $\frac{1}{100}$). If the dose exceed gr. $\frac{1}{60}$, unpleasant toxic effects follow.

Vomiting of Infants.—The vomiting of young infants may often be cured by the exhibition of one-third of a grain of hyd. c. cret. every three hours, though sometimes it proves intractable and even dangerous to life.

The Specific Organism in Hog Cholera.—Dr. Salmon states that he has certainly found the microbe which is the cause of the swine plague. It is a bacterium, and produces all the symptoms of the disease.

Nitrite of Amyl in Opium Poisoning.—It is reported (*L'Union Médicale*) that a case of opium narcosis was relieved by nitrite of amyl after belladonna had failed, and the patient was almost beyond help.

Tetanus from the Horse.—M. Verneuill, of Paris, has undertaken to show that tetanus is due to the germs derived from the horse, the germs being introduced into a wound in the human being.

Morrhuol.—The active principle of cod liver oil has been obtained by a Parisian. He says it gives excellent results when used instead of the crude oil.

Method of Removing Nitrate of Silver Stains.—Dip the fingers into a strong solution of cupric chloride. In about a minute the silver will be converted into chloride, and may then be washed off with sodium hyposulphite solution.

APPOINTMENTS.—Dr. Theo. S. Covernton, Jr., of Toronto, has been appointed Examiner in Hygiene and Medical Psychology in Toronto University.

WE regret to announce the death of John P. Gray, M.D., LL.D., Medical Superintendent of the State Lunatic Asylum, Utica, N.Y,, aged 61 years. He was for many years editor of the *Am. Journal of Insanity*. It will be remembered that he was shot by a lunatic in 1882. He never fully recovered from the effects, and finally succumbed to Bright's disease. He was one of the foremost alienists on this continent.

ANGINA PECTORIS.—Iodide of Sodium, is highly recommended by Hichoed, in the treatment of Angina. Laschkevitch (Rev. de Med.) speaks highly of the effect of cocaine in doses of from $\frac{1}{2}$ to $\frac{1}{3}$ grains three times a day.

DR. WILLIAMS (*Boston Med. and Surg. Jour.*) says he has averted a great many felons, by keeping a rag tied loosly around the finger, constantly wet with cold water. They must be taken in the earliest stage.

M. DOYEN (*Br. Med. Jour.*) recommends the following in inflamed ecyzema and ulcerated impetigo: Salicylic acid, 2 grammes; lanolin, 50 grammes; zinc oxide, 24 grammes; starch, 24 grammes.

DR. ILLINGWORTH recommends the tincture of perchloride of iron in five drop doses, sweetened with glycerine, in enteric fever.

Books and Pamphlets.

THE PRINCIPLES AND PRACTICE OF MEDICINE; for the use of Practitioners and Students of Medicine. By Austin Flint, M.D., LL.D., late Professor of Medicine in Bellevue Medical College, New York, etc. Sixth Edition, revised and re-written by the author, assisted by W. H. Welch, M.D., Prof. Pathology in John Hopkin's University, and Prof. Austin Flint, jr. Philadelphia: Lea Bros. & Co., 1886.

The following Extracts from the Preface to the sixth edition will be read with interest, as evincing alike the enormous personal experience upon which the author founded his opinions and the very complete manner in which he has presented to the fellow-members of his profession the matured results of his life's labors.

"The basis of the work is an unbroken series of records of cases in private practice and in hospitals, begun in 1833 and continued for more than half a century, covering sixteen thousand nine hundred and twenty-two folio pages of manuscript, written with the author's own hand. These records embrace carefully-written histories of cases in all departments of practical medicine, observed under varied conditions of life, climate and general surroundings; cases observed in the experience of a quarter of a century of a general practitioner and of more than another quarter of a century as a consulting physician, including the epidemics which have occurred in this country within the last fifty years—the experience derived from these various soures of observation, carefully recorded, studied and analyzed, was finally used in the composition of this treatise, the first edition of which appeared in the year 1866. In the meantime the author's original contributions to practical medicine, embodied in special treatises, in communications published in medical periodicals, and in transactions of medical societies, have left their impress upon many departments which, in recent years, have been classed as specialties; although he was always a physicain, never a specialist. A student of the history of practical medicine will often find observations and ideas, assumed to be of recent date, which had been anticipated by the author many years before.

Among the entirely new articles, special attention may be called to the following: Infectious Tumors; Syphilitic Diseases of the Lungs; Cerebral Syphilis; General Considerations relating to Inflammatory and Structural Diseases of the Spinal Cord; Spastic Cerebral Paralysis of Children; Hereditary Ataxia; Myxœdema; Multiple Neuritis; General Pathology of Fever; and Milk Sickness. In addition to these new features, many articles have been entirely rewritten; and in nearly every article changes and additions, some of them very important, have been made.

The sixth edition also contains a full consideration of recent discoveries concerning the bacterial origin of various infectious diseases, as will be rendered evident by a consultation of the article on Vegetable Parasites in the chapter on Eti-

ology, and articles in the chapters treating of Tuberculosis, Typhoid Fever, Cholera, etc.

RHEUMATISM: ITS NATURE, ITS PATHOLOGY, AND ITS SUCCESSFUL TREATMENT. By T. J. Maclagan, M.D.: New York, W. Wood & Co.

This is a valuable book. The publishers seem to have known the fact, for they have not hung out any *broom*. Perhaps the author has no string of medico-algebraic signs of unknown quantities, from which to construct a caudal flourish. Whether so or not, we have been thankful for the absent appendages, and we entered on the perusal of the book with the determination of judging of its merits according to the evidence presented by the contents.

The style is clear, simple and inviting, and the diction is happily free from those grammatical oversights which too often disfigure the pages of some other treatises issued by American publishers.

The book consists of twenty chapters, in which the following subjects are treated of. 1st. The varieties and symptoms of Rheumatism. 2nd. The duration of Rheumatism. 3rd. The seat of Rheumatism. 4th. The nature of Rheumatism. 5th. The nature of the Rheumatic poison. 6th. The Lactic Acid theory of Rheumatism. 7th. The Miasmatic theory. 8th. The nature of Malaria. 9th. Its mode of action. 10th. Rheumatism of the loco-motor appartus. 11th. Rheumatism of the vasculo-motor apparatus. 12th. Endocarditis. 13th. Pericarditis. 14th. Myocarditis. 15th. The treatment of Loco-motor Rheumatism. 16th. The mode of action of the Salicyl compounds in Rheumatism. 17th. The treatment of Vasculo-motor Rheumatism. 18th. Cerebral Rheumatism. 19th. The relation of Rheumatism and Chorea. 20th. Rheumatic Hyper-pyrexia.

These headings certainly present an appetising bill of fare. The reader will not be disappointed in either the savor or the digestibility of the viands. The author shows that he is well acquainted with the existing literature of his subject; and the modesty and impartiality evinced by him in his criticisms, merit high commendation. It is to be hoped that succeeding writers, who may question the soundness of his views, will be governed by a similar delicacy.

Perhaps the points most inviting to demurring criticism, will be found in his views on malarial poison germs as the *sine qua non* efficient factor in the causation of rheumatism, and his consequent committal to this lately born morbific agent: and in inevitable association with this must come his advocacy of Salicyn as the appropriate germicide. His repudiation of the lactic acid theory of rheumatismal causation, must also provoke controversy. It may, too, seem strange to some readers, that the profuse sweatings, provoked, as he says, by redundancy of lactic acid in the blood, should be the efficient cause of the high degree of bodily heat in certain cases of acute rheumatism. Sweating has heretofore been regarded as a natural cooling process, and it is doubtful whether the cutaneous irritation caused by this substance, may not be compensated by the process of coincident evaporation attendant on it. It may also be alleged by scrupulous critics that Dr. Maclagan is rather forward in his assumption of the existence of a thermal centre in the cerebro-spinal axis. At all events it is questionable, as yet, whether it is quite safe to locate this centre in the medulla spinalis at the point assigned to it by the author. His *a priori* arguments, in advocacy of this structural provision, as an arrangement complementary to those of other corporeal functions, are ingeniously plausible, and well worthy of the reader's serious attention. The final chapter, on Hyperpyrexia, in which this matter is ably treated of, will not fail to command the admiration of every lover of fledgling theories. It is truly a captivating production, and it is well worth while to peruse assiduously all that precedes, in order to reach this dazzling culmination.

Finally, we are constrained to say, that if all the monthly issues, or even a handsome minority, devoted by the enterprising house of Wm. Wood and Company, to the medical profession, were as well deserving of approbation as this treatise of the tailless Dr. Maclagan, medical science would be largely enriched.

A TEXT-BOOK OF HUMAN PHYSIOLOGY, INCLUDING HISTOLOGY AND MICROSCOPICAL ANATOMY, with special reference to the requirements of Practical Medicine. By Dr. L. Landois, Prof. of Physiology in the University of Greifswald; with additions by William Sterling, M.D., Sc.D., Brackenbury Prof. of Physiology and Histology in Owen's College, Manchester, etc. Second

American from fifth German edition; pp. 922, with 583 illustrations. Philadelphia: P. Blakiston, Son & Co. Toronto: Hart & Co. 1886. Cloth, $6.50; leather, $7.50.

This classic on physiology has passed through four editions in Germany since its first appearance in 1880. At present, when thoughtful men are trying by every means to apply their physiological knowledge in their practical work, such a book is well-nigh invaluable, for the author appears to have kept steadily in view the idea of making the work practical, and of "forming a bridge between Physiology and the Practice of Medicine."

The subject-matter is so arranged as to be easily understood, a matter of great moment in a work which claims to be comprehensive and at the same time concise. The histology is more fully dealt with than is the case in most text-books on physiology, while the *résumé* of pathological variations appended to each section, not only draws the student's attention from the first, to the relation between normal and pathological processes, but enables the practitioner to refresh his memory, by "passing backward" from the abnormal to the normal processes of the body. The various methods of investigation which may be used by the general practitioner, are fully and clearly described, a matter of importance at present, when Pharmacology is considered one of the important branches of a medical education.

The translator has performed his task well, and has not only presented the work in a truly English form, but has made many valuable additions where such seemed necessary. The work is, as we intimated before, a classical one, and we heartily recommend it to all students and practitioners of medicine.

ERUPTIONS; THEIR REAL NATURE AND RATIONAL TREATMENT. By Dr. Barr Meadows, L.R.C.P. E., M.R.C.S., etc., etc. Ninth edition; pp. 84. London: George Hill. Toronto: Hart & Co.

The author proposes to demonstrate the symptomatic nature of eruptions generally, and to lighten the burden of the student and practitioner —caused by the cumbrous classification now in vogue, and to point out the natural mode of treatment in accordance with the general principles of medicine. The work will repay a perusal.

A TEXT-BOOK OF MEDICINE, for Students and Practitioners, by Dr. Adolf Strûmpell, of Leipsic. Translated from the 3rd German edition by H. V. Vickery, M.D., assisted by P. C. Knapp, M.D., Boston, Mass. 111 illustrations. New York: D. Appleton & Co. Toronto: Williamson & Co.

The above work, which is new to most of our readers, has achieved great success in Germany, having reached the third edition in a very short time It has been introduced as the text-book on medicine in the Harvard Medical School. The work is especially commendable in its treatment of nervous diseases, which are dealt with fully, concisely and clearly. The pathology of disease, as might be expected from so eminent a teacher, has received due and careful attention, and this is another strong feature of the work. The details of treatment are not as satisfactory as could be wished, but what is given is based upon the practical experience of the author and are probably sufficient for the needs of most practitioners. The author gives in this work the results of the experience and observation of more than six years active work in the medical clinic in Leipsic. We heartily commend the work to the attention of our readers.

MANUAL OF OPERATIVE SURGERY by J. D. Bryant, M.D., Prof. of Clinical Surgery Bellevue Hospital Medical College, New York, with about eight hundred illustrations. New York: D. Appleton & Co. Toronto: Williamson & Co.

The apology given by the author, if any apology be needed for the appearance of so excellent a work, is the frequent request on the part of those whom it has been his pleasure to instruct in operative surgery during the past few years, to make a book based somewhat on the plan he has employed in teaching this subject. We have perused this work with great pleasure and profit, and can bear testimony to the care and attention which the author has bestowed to make the book a benefit to his co-workers in the same field. The cuts are numerous and well executed, and the text clear and well printed. The various operative proceedures are clearly and concisely described, and the results of the various operations briefly stated. The chapter on the treatment of operation wounds is worthy of special mention. The work is fully abreast of the most recent advances in operative surgery, and we have much pleasure in recommending it to our readers.

Births, Marriages and Deaths.

On the 24th October, Dr. A. E. Croucher, of Bridgewater, N.S., aged 50 years.

On the 1st ult., G. A. Neal, of Ruthven, Ont., aged 37 years.

On the 6th ult., James O'Shea, M.D., of Campbellford, Ont., aged 36 years.

At Peterborough, on the 24th December. Dr. W. H. Burritt, aged 78.

On the 26th ult. Dr. Robt. Hobbs, of London, Ont., aged 86 years.

On the 24th ult., Dr. W. B. Nicol, aged 74 years.

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Original Communications.

OVARIOTOMY DURING PREGNANCY—A CASE WITH REMARKS.

BY WILLIAM GARDNER, M.D.,

Professor of Gynæcology, McGill University; Gynæcologist to the Montreal General Hospital.

On the 10th November, 1884, by the advice of my friend, Dr. Dugdale, of this city, I was consulted in the case of a lady, æt. 37, the subject of an abdominal tumor. She had been married 18 or 20 years and was the mother of two children, one a grown-up daughter, born a year after marriage; the other 11 years of age. A few months after the birth of the last child she began to suffer from cough, hæmoptysis, pain in the chest, dyspnœa, emaciation, and all the other evidences, general and local, of phthisis. The physical signs existed mainly in the right lung, in the apex of which a cavity was diagnosed. So serious were the symptoms at one time, that it was thought by her medical advisers that she had but a few months to live. She however rallied, and although never long free from cough and expectoration, her general condition became much better and she had for several years lived in tolerable comfort. To this result the preparation known as Hydroleine had seemed to contribute very much. Between three and four years previous to my seeing the lady, a tumor, diagnosed as ovarian, had developed, and when I saw her the abdomen was enlarged thereby equal to pregnancy of six months. All the evidences of cystic ovarian tumor were present, but as it had grown none for a year or two, was not painful, did not seem to be markedly affecting her general health, and as a portion of the tumor occupied the pelvis where it might be adherent, seriously complicating ovariotomy in a delicate woman, I advised non-interference until some indication for prompt action arose. My advice was followed. I did not again see her till early in May, 1886. I then learnt that the lung symptoms had been alternately somewhat active and quiet, the tumor remaining stationary till March, 1886, when it began rapidly to increase in size; menstruation, which had hitherto been quite regular, ceased on 16th February, after a natural flow. There had been nausea and some vomiting. The large increase of the tumor had produced much dyspnœa and pain in the right side of the chest. On some nights the patient had been unable to lie, from difficult breathing. I found her emaciated and slightly livid from impeded breathing. The breast signs were doubtful, but on examination the vagina was purple in color, and both it and the cervix were markedly softened. Enlargement of the uterine body, commensurate with the probable duration of pregnancy, was tolerably well made out. That part of the tumor which occupied the pelvis, at the examination eighteen months previously, had disappeared upwards. The patient believed that she was pregnant, and so did her physician. I could only agree. She was watched for a fortnight or more. Her sufferings decidedly increased, and it became apparent that prompt action was necessary. Both patient and her husband (a non-practising physician), urgently desiring the operation. After gentle purgation and dieting for two days, on the 29th May the operation of ovariotomy was done at the home of the lady, Drs. Roddick and Bell assisting. Ether was the anæsthetic used, not however without some misgiving as to its possible effect on the lung conditions. The operation was simple and easy — a unilocular cyst of the right ovary, with favorable pedicle and no adhesions. On getting into the belly, it was interesting to note the contrast between the dark red fundus of the womb, as it lay behind the pubes, with the pearl-colored tumor above it.

The after-course of the case was easy and uninterrupted to recovery; no sickness and very little pain; the cough, necessary to get up the expectoration, being the only distressing symptom. The wound healed without a fraction of a drop of pus, either at the line of union or stitch-holes. She was kept in bed four weeks to allow of the cicatrix becoming firm under the strain of the developing

uterus. After three months' absence in Europe, I called on her in October and found pregnancy advancing, but the enlarging uterus causing considerable distress in breathing. She was confined by her physician at full term on the 26th November, three days less than six months after the date of operation. Labor terminated naturally after six hours. It was followed by alarming hemorrhage, which led to fainting and syncope. It was controlled by ice. The child, a fine healthy boy, weighed nearly ten pounds. She made an excellent recovery, suffering from nothing of any moment, except weakness from loss of blood.

The complication of ovarian tumor with pregnancy is one which must always justify much anxiety. This is greatly increased if, as in the case just related, there be a further complication with grave lung disease. The effect of pregnancy on a previously existing ovarian tumor is as a rule to stimulate it to rapid growth, with the obvious result of serious encroachment on adjacent viscera. The condition of the lung in this case greatly increased the patient's sufferings. The remarkable fact that this was first pregnancy after nearly twelve years, must be noted. Notwithstanding the fact that there are now on record a number of cases of successfnl ovariotomy during pregnancy, obstetrical authorities and the general profession are not in perfect accord as to the proper course to pursue in these trying circumstances. It is quite true that women have in rare instances borne several children safely at full term, while suffering from ovarian tumor, but these are few when compared with the many fatal cases of premature and full time labor to be found recorded in the annals of the subject. During labor the tumor may burst, or its pedicle be twisted, or it may suffer such injury from pressure that it suppurates, with almost invariably fatal results in each case. The only thing to give the patient a chance under these conditions, must be immediate operation to remove the tumor, under very unfavorable circumstances. When during labor the tumor suffers no injury, the puerperium is often influenced very unfavorably. If the patient survive, the tumor must be dealt with sooner or later to save her life. The size of the tumor does not much influence the result. A large tumor which has of course become abdominal, together with the gravid uterus produces dangerous pressure on adjacent viscera of abdomen and thorax; while on the other hand a small tumor, probably occupying the pelvis, is more liable to such injury as shall lead to rupture or suppuration with consequent peritonitis.

Isolated cases of fatal, supposed puerperal septicæmia or inflammation from this cause are certainly much more common than is generally supposed. A paper by Dr. Grigg on some cases of this kind, read before the British Gynæcological Society last June, is of great interest in reference to this subject. It was a record of five fatal cases, the whole mortality at the Queen Charlotte's Lying-in Hospital, London, during nine months. A careful autopsy was made in each case, and the result showed that in four, diseased conditions of the uterine appendages were present and more than enough to cause death, and which, had they not been fully investigated, would have been put down in the category of puerperal septicæmia. Two of the four were small ovarian cysts; one of them suppurating. A third was abscess of the left ovary and pyosalpinx. The alternative to ovariotomy for relief from a large ovarian tumor is tapping, and it is still urged by the more conservative of the profession. It can do good only in unilocular cyst. It is attended by many dangers. It is not a radical cure and may be only temporary in its results, for the cyst may rapidly refill, and in any case sooner or later the radical ovariotomy must be done.

The induction of abortion or premature labor cannot be recommended as it has been shown as the result of experience, to be by no means free from danger to the mother, while the child must usually be sacrificed, and yet, as a result of conversation with my professional brothers, it seems to be the course which is most likely to suggest itself. I believe I am justified in saying that, in the complication of ovarian tumor with pregnancy, when the case is diagnosed before labor begins (for which, however, there is not always the opportunity), the rule is to be laid down, to promptly remove the tumor, and the earlier this is done, the better are the chances for both mother and child. It may be further added that serious organic lung disease does not of necessity complicate the operation or render ether as the anæsthetic more dangerous.

GASTROSTOMY FOR MALIGNANT STRICTURE OF THE ŒSOPHAGUS: A CASE.

BY A. M'PHEDRAN, M.B.,

Lecturer on Medicine, Woman's Medical College, Toronto.

Eliza S., aged 41, first consulted me in April, 1886. Her family history was good. She had always been healthy, though not very strong, her digestion was always weak. About Christmas, 1886, she began to complain of pain in the chest, behind lower part of sternum and in the mid-dorsal region; it was almost constant, and not increased by food. During March and April she was unable to take solid food, and fluids were swallowed with increasing difficulty, part of them being often rejected, without nausea, as soon as swallowed. Large mouthfuls of clear mucus were thrown up at short intervals. On exploring the œsophagus early in May, the sound was arrested at 11 inches from the upper dental arch, showing stricture just below the level of the left bronchus. A No. 10 catheter passed fairly easily, causing some pain, and afterwards a No. 12. By the middle of May she was wholly unable to swallow anything, even a teaspoonful of water returning almost immediately, and the amount of mucus thrown off increased; it was often tinged with blood; both evidently came from the œsophagus. A catheter was introduced into the stomach three or four times daily for the purpose of giving nourishment, a funnel into which the food was poured being attached to the catheter. The introduction of the catheter always caused pain, but she was fairly well nourished and gained somewhat in flesh and strength. The stricture rapidly contracted, so that by June 1st only a No. 8 catheter could be used, and the pain from the introduction so greatly increased that it was evident she could not continue to take nourishment much longer by this method Rectal alimentation could not be continued for more than a few days, on account of the severe colicky pain induced. As she suffered from hunger and thirst, especially the latter, gastrostomy was proposed, the risks and disadvantages being fully explained to her. After some hesitation she decided to have it performed, and the first stage of the operation was done on June 11th. There were present and assisting Drs. Machell, Carveth, Cameron, Nevitt, Duncan, Foster and J. Caven. An incision, three inches long, was made three-quarters of an inch below, and parallel to, the costal cartilages of the 8th and 9th ribs, beginning nearly an inch to the left of median line. On opening the sheath of the rectus the direction of the incision was changed to that of the fibres of that muscle, so as to secure the benefit of any sphincter action that the rectus might subsequently exercise. On opening the peritoneum the liver and stomach came into view, the latter much contracted and overlapped by a fold of the lesser or gastro-hepatic omentum. The stomach walls were thick and of the usual pinky red color, but to make certain that it was not the transverse colon we had exposed, the lesser omentum was traced upwards to its attachment to the liver, and the stomach itself traced nearly as far as the attachment of the œsophagus. The stomach being then brought downwards, and to the right as far as possible, a fold of it was drawn through the opening and transfixed at right angles to the skin incision by two harelip pins, the serous and muscular coats only being pierced, allowing the mucous coat to recede. Silk sutures were then introduced so as to bring together the peritoneal as well as the superficial parts of the wound closely around the protruding portion of the stomach, but no sutures were introduced into the stomach, which was held firmly in place by the pins. The wound was then freely dusted with iodoform, over which dry gauze and salicylated wool were placed and secured by a broad flannel bandage. She recovered from the effects of the ether without any disturbance. The temperature and pulse remained normal throughout the subsequent history; a little soreness at seat of operation, for a few days, was all that was complained of. For three days she was given food by the bowel; after that, owing to colic, nourishment was again given through the œsophageal tube, which was introduced with ease for a few days. The first dressing was not changed until the fifth day, when union was found to have taken place by first intention. The gauze covering the protruding portion of stomach was so intimately adherent by plastic effusion that it was separated with some difficulty, and caused some breaking down of the union between the stomach and the superficial parts of the wound, which took some days to

unite. The stomach was opened on the 21st June by passing a narrow tenotomy blade down between the pins nearly an inch, without apparently entering the stomach. Before withdrawing it two probes, bent at right angles, were passed down one on each side of the knife, with which to dilate the fistula for the introduction of a small tube or catheter, as advised by Fagan of Belfast.* The tube not entering the stomach, a little milk was introduced into the stomach by way of the œsophagus, that its presence might indicate when the stomach was opened, and thus prevent injury to structures behind the stomach. The knife was again passed down between the probes and forced gently onwards when it soon entered the stomach, and some of the milk mixed with gastric juice was easily withdrawn. A No. 6 catheter was then passed through fistula, and through it 3 oz of milk was injected; the catheter was left in the fistula, a compress being placed around it. Food was to be given every three or four hours through the catheter. The opening of the stomach gave no pain, and was made without any anæsthetic being given. A little nausea was experienced but no other inconvenience. The size of the catheter was gradually increased until a soft rubber tube, equal to No. 18 English scale, could be introduced, and this was retained, being corked to retain contents of stomach. From the first there was some trouble from oozing around the tube, which caused more or less excoriation. With this exception everything was satisfactory; hunger and thirst being completely relieved. She was able to be out driving early in July. The pain in the chest was much less troublesome, being at times absent for days. She continued to regurgitate the clear mucus from the œsophagus, sometimes with a little blood; occasionally the bleeding was profuse, on one or two occasions continuing for a whole day, after which she would be considerably prostrated. Her condition was satisfactory during the months of July to October, during which her strength and flesh had considerably increased. She began to fail perceptibly early in November, though still taking food freely; with the failure the oozing increased. Early in December she was confined to bed—cough developed and increased, with dyspnœa and frequent free hemorrhages. The oozing became so free that she could take but little nourishment, and death took place on Dec. 28th—six months and 18 days after the operation.

Post mortem examination.—Emaciation marked, but not as extreme as usually obtains in cases of death from cancer. The union at the fistulous opening was firm, the margin of the liver being also adherent. No adhesions beyond the immediate circumference of the opening, which was one inch from the pylorus. The stomach was considerably dilated, extending two inches below the fistula—the walls were thin. The upper part of the œsophagus was dilated; the lower five inches converted into a sloughy cavity filled with foul grumous material. The disease implicated the aorta, bronchus and spine. The backs of both lungs were in a state of advanced hypostatic pneumonia; they contained no secondary cancerous deposits. The pneumonia was doubtless the immediate cause of death.

Remarks.—The objects aimed at by this operation were—primarily and chiefly, the relief of suffering from hunger and thirst, and secondarily, the prolonging of life. The operation at best is only a palliative one unfortunately, at least in all cases of malignant stenosis. Nevertheless, as the dangers arising from gastrostomy, as from all other abdominal sections, are now comparatively slight, if the patient be not too prostrated, the operation is one at least worthy of consideration in all cases of œsophageal stricture. Since the division of the operation into two stages, all the deaths occurring from it of which I have seen any record, have been due to prostration, the operation having been too long postponed. Of 13 cases operated on by Dr. Knee, of Moscow, 10 recovered, six of them living from five to nine months; four were lost sight of in a few months after the operation, and three died—one on the second day from perforation of left bronchus, one on eighth day from bleeding, and the third on twelfth day from prostration.* If resorted to at an early stage of the disease, there should be few if any deaths from the operation. In a few cases the colon has been secured instead of the stomach, and death has resulted; such an accident has occurred to one of the most prominent British surgeons, and is one to which all are liable.

Brit. Med. Journal, October 4th, 1884.

* *Annals of Surgery*, Sept., 1886.

The method of securing the stomach resorted to in this case was that recommended and practised by Boyce Barrow, of the West London Hospital,* as being more expeditious than, and quite as efficient as, the method of a double circle of sutures, recommended by Howse, to whom is due the credit of rendering this operation safe by its division into two stages. Barrow's directions were departed from, in that only the serous and muscular coats were transfixed to the pins; by transfixing the mucous coat also, as he directs, the stomach would be more easily opened, as the mucus membrane would not recede from the surface, as it did in this case, necessitating the passing the knife so deeply before reaching the cavity of the stomach. But it is possible that the wound may be more easily and certainly rendered aseptic by transfixing only the serous and muscular coats, as septic matter might find its way along the pins, if the mucous coat is transfixed.

The sutures for closing the wound might with advantage, I think, be passed before securing the stomach, as the protruding portion of stomach is in the way of their being easily passed afterwards. Those sutures that could not be tied on account of the protruding stomach, should be used to suture the peritoneum to the skin on each side, thus presenting a broader peritoneal surface for union with the stomach, and securing more rapid union. This union takes place very rapidly; it has been found firm in one case in 19 hours, and another in 24 hours, and a third in 30 hours.† This indicates that in urgent cases rectal alimentation can with safety be supplemented by food by the mouth after 24 hours, or in case of necessity, that the stomach might be opened with fair safety—the risk of opening would be much less than that of delay in administering nourishment. It would seldom be advisable to operate in cases requiring such urgency; surgical interference has been too long postponed. Nevertheless, in some cases the stomach should be opened immediately after the preliminary operation is done; but such a course is rarely advisable.

As it is desirable to have the opening in the stomach as far as possible to the splenic end, in order that food may enter more easily, and that oozing from the fistula may be less liable to occur, the stomach should be drawn well to the right before being secured. The constant retention of a tube in the fistula probably tends to increase the leakage; it would in that case be better to use only a small tube, and introduce it when nourishment is to be given; any oozing occurring as the tube is withdrawn, to be removed with absorbent cotton, and a suitable compress placed over the opening. Bryant, in his work on surgery, recommends an ordinary enema syringe with a funnel at one end and a small tube at the other for giving food. With which an appliance, finely minced solids mixed with liquids could be easily introduced into the stomach—the patient might even enjoy the pleasure of masticating his food, and then putting it into the funnel partly filled with liquid, after which all could be forced into the stomach.

* *British Medical Journal*, Dec. 6th, 1884.

† *Philadelphia Medical News*, 1st Dec., 1883.—Gross.

EXCISION OF THE KNEE-JOINT.

BY N. E. M'KAY, M.D., C.M., M.B. M.R.C.S., ENG.,

Surgeon to Provincial Hospital, Halifax, N.S.

The operation of excision of the knee-joint is considered hopeless by many surgeons. I am not aware of a successful case in Nova Scotia. Even in Edinburg, I believe, it is looked upon with disfavor. To aid in removing the bias with which the operation is too generally viewed, I beg to report the following successful case.

G. O., aged 22, single, thickly set, fairly well nourished, of a slightly sallow complexion, was admitted into the Provincial Hospital on Nov. 18th, 1885, suffering from pulpy degeneration of the knee-joint.

Previous History.—Patient had always been well until four years ago, when his present ailment began. His trouble began with slight pain and stiffness in the knee-joint, which kept gradually getting worse. He was obliged to seek admission into the Hospital early in March, '84. This was during the *régime* of the old Medical Board of the Hospital, and no record was kept of his case. He says, while in the Hospital, his knee was freely cauterized and blistered, which gave him temporary relief. He left the Hospital early in November, 1884, improved. From the time he left the Hospital until October, 1885, he was able to walk about without the aid of crutches, but was unable to bend his knee. He came for the first time

under my notice when re-admitted into the Hospital in November, 1885.

Present Condition.—On admission his knee was very much swollen, round, doughy, and semi-elastic; its motion limited; the leg slightly flexed; the knee apparently bent a little inward; and the head of the tibia slightly displaced backward and outward. He had slight pain and tenderness in the joint; the pain being increased on motion and on pressing the ends of the bones together. There was a little increase of local temperature. He had no starting pains in the limb at night.

Treatment.—Constitutionally everything was done to invigorate the system by abundance of good nourishing food, pure air, cod liver oil, iron, and other alteratives. Locally the knee was strapped in Scott's dressing, and to ensure absolute rest to the joint, the patient was put in bed, and a Buck's extension applied, for which a back splint was subsequently substituted. This treatment was continued until the latter part of January, 1886, when an operation was determined upon. At this time the subjective and objective symptoms already enumerated, were slightly exaggerated; distinct lateral motion was present in the joint, indicating destruction of the ligaments, and slight grating noise could be detected on rubbing the ends of the bones together. The patient now complained of starting pains of the limb at night.

On the 3rd of February, 1886, the knee was excised, the operation being performed under a spray of carbolic acid (1 in 40), and with strict antiseptic precautions. On opening into the joint cavity, by the ordinary incision, the synovial membrane was found to be converted into a pulpy, gelatinous, pinkish-gray mass; the articular cartilage destroyed, except a small detached piece, the size of a fifty cent piece, which covered the external condyle; a large sequestrum imbedded in the inner condyle, and a small abscess cavity containing pus, caseous material, and *debris* of broken down tissues in the external condyle. I removed a slice of bone about a quarter of an inch thick from the entire surface of the condyles of the femur, making the surface present a convexity; and a similar slice from the head of the tibia, making its surface a concavity to better fit the convexity of the condyles of the former. I then removed the sequestrum, and the *debris* of broken down tissues, and carefully dissected away the patella and all the diseased synovial membrane, and scraped out the synovial pouch above the patella. The hemorrhage having been stopped, and the wound thoroughly washed with carbolic solution (1 to 40), the parts were adjusted in proper position on a back interrupted iron splint with a foot piece—a modification of Sir William Ferguson's. Dr. Watson's suspension rod was applied to the front of the limb, and both splints were held firmly in position by plaster of Paris bandage, coated with paraffin, and the whole apparatus was suspended in a Salter's swing. The wound was brought together by silk sutures, a large drainage tube was introduced at either angle, and a Lister's dressing applied.

On the morning after the operation his temperature rose to 99° F., and in the afternoon to 100°. On the evening of the third day it rose to 101°, and remained so with scarcely any fluctuation until the morning of the 6th day, when it fell to 98½° and remained so.

On February the 4th, the day after the operation, the dressing which was soaked with blood and serum, was removed under the carbolic spray. The wound looked well. Feb. 10th the wound was dressed under the spray; it looked well and was healed by first intention; no discharge; every alternate stitch was removed. Feb. 15th wound dressed under the spray; removed all the stitches and also the drainage tube, which was left out. Feb. 22nd dressed wound; it looked well; spray discontinued. March 1st dressed wound, and found in the middle of the line of incision a small pocket containing five or six drops of pus. The splint was then taken off on the 10th of March, the 44th day after the operation, when firm, bony union was found to have taken place. The leg was put up in a plaster of Paris bandage, and the patient allowed to walk about the ward on crutches. From this time until he left the Hospital, early in June, his recovery was uninterrupted and rapid. When discharged the limb was 1 inch shorter than the other, and the patient could walk well.

It may be asked why I did not at the outset use the actual cautery in the treatment of this case? My answer is, that whatever good may follow the use of the cautery in the incipient stage of pulpy degeneration of joints, its employment is useless, if not injurious, in cases in which there is unmistakable evidence, as in this case, that degeneration of the synovial membrane and ligaments has taken place.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

January 6th, 1887.

The President, Dr. McPhedran in the chair.

PATHOLOGICAL SPECIMENS.

Dr. Temple showed the uterine appendages removed on account of purulent salpingitis of both tubes. The patient, aged 33, had been married 11 years, was never pregnant, and began to suffer one year after marriage. During the last year she was almost constantly confined to bed, as any exertion caused severe pain in the pelvis, lasting several days, probably due to circumscribed peritonitis. The patient was thin, and the abdomen was enlarged equal to the fifth month of pregnancy. On examination, the uterus was found to be pushed forwards and upwards, so that the cervix could be felt with difficulty behind the pubic symphsis. The Douglas cul-de-sac was filled with a fluctuating mass. The right tube could be accurately mapped out by bimanual palpation; the left could not be so well outlined. On opening the abdomen, the mass presented the appearance of a fibro-cyst. The structures were greatly matted, the adhesions being separated with difficulty. The right tube burst during separation and about ℥viij of pus escaped into the peritoneum. The right ovary was removed—the left could not be found. It had probably became absorbed from pressure. The patient made satisfactory progress, the temperature not exceeding 101°F., usually varying from 99° to 100°.

Dr. Ross exhibited a placenta from a case of twin pregnancy in which the cords, which were attached to the placenta very close together, were inextricably knotted. Death of both fœtuses had occurred, evidently some days before birth. One of the children was hydrocephalic, and it was found necessary to puncture the head before delivery could be effected.

Dr. McPhedran presented a stomach, etc., from a case of circinoma of the œsophagus for which gastrostomy had been done. (The paper appears pear in full elsewhere.)

Dr. MacMahon read a paper on "The Alcohol Question." Scientists of the present day rank alcohol among the starches and sugars as a heat producer. He claimed for it great usefulness for convalescents, for anæmic persons, for those whose digestive powers are below par, and also for those who are subjected to a large expenditure of nerve-force. No bad effects follow its moderate use. Alcohol-drinking nations are characterized by more intelligence, and better physical development, than are nations of total abstainers. To combat the evils of intemperance the fermented beverages, as light wines and beer, should be substituted for the distilled liquors. Adulteration should be prevented, and the condition of the lower classes ameliorated. Above all he believed in acting on the moral natures of men to induce them to abstain from over-indulgence.

January 13th, 1887.

The President, Dr. McPhedran in the chair.

Dr. Graham read a paper on "Arsenic in the treatment of Skin Diseases." He first considered the negative aspect of the subject, quoting Drs. Fox, Hardway and others as holding the opinion that in *some* forms of skin disease, principally those of an inflammatory nature, arsenic was not simply useless but positively harmful. From the positive point of view, the writer of the paper dealt with the effects of arsenic on the skin in causing degeneration and partial dissolution of the protoplasm of the cells. The epidermis separates and desquamates, and the cells of the Malpighian layer are loosened and separated from one another; in short, arsenic causes a mild inflammation of the skin, hence, it is contra-indicated in acute affections. In small doses it beautifies the complexion, but if given freely it may cause a brown discoloration; bullous eruptions have also been attributed to the use of arsenic. Part of the beneficial action of arsenic may be due to its action as an oxygen-carrier, arsenious acid having the property of absorbing oxygen to form arsenic acid, and then returning to its original form by giving up the oxygen. The author had found arsenic to be very useful in psoriasis guttata, not so good in psoriasis diffusa, and positively harmful in the congestive form of this disease. In eczema it is not of such general use, as it is injurious in acute cases, though it is of some service in the chronic forms with scaling. Though children bear comparatively larger doses of arsenic than adults, they are more liable to pneumonia and bronchitis from it use

than adults. When eczema is malarial in origin, the arsenic may be given with much benefit.

Hutchinson reports 26 cases of pemphigus chronica cured by arsenic. It is, however, useless in the foliaceous form of this disease. It is useful in chronic urticaria and erythema nodosum. Benefit will follow its use in alopecia following typhoid fever and syphilis, but not in areata. Acne indurata is benefited. In the malignant diseases of the skin, such as multiple sarcoma and epithelioma, arsenic is very useful, especially in the form of Donovan's solution.

Discussion.—Dr. Reeve had found arsenic useful in the furuncular habit in patients so affected.

Dr. Sweetman had used it with marked benefit in two cases of keloid.

Dr. Ghent related a case of psoriasis of nine years' standing which had been cured by giving a course of brisk purgatives, extending over a period of three weeks, and followed by a tonic of ferri carb. and port wine. Pot chlor. was also given freely. The external treatment consisted in a wash of pot. carb. to dissolve the crusts, followed by the application of thick rice water, which formed a thin wax-like or gelatinous layer which excluded the air. Complete cure took place in about two months.

HURON MEDICAL ASSOCIATION.

January 11th, 1887.

The Association met in Seaforth, the President, Dr. J. Campbell, in the chair.

Dr. Graham, of Brussels, read a paper on Floating Kidney, and presented a patient before the meeting. The patient, a middle-aged lady, had consulted Dr. G. for a swelling in the situation of the right kidney. She complained much of dragging pains, loss of appetite, and dyspeptic symptoms; vomited often, was debilitated, and had bronchitis. There had been great irritability of the bladder, but the uterine system was healthy. The medical men present examined the patient, and agreed that it was a case of movable, or floating kidney. The treatment, as outlined by Dr. Graham, was approved of, viz-, to treat the symptoms as they arise, such as indigestion, anæmia, phosphaturia, etc., advising the patient to refrain from straining or violent exercise, and applying an elastic bandage or truss with a well-fitting pad to retain the misplaced organ in place.

Dr. Campbell, of Seaforth, presented a case of Ichthyosis, which was examined by those present. The disease appeared in the form known as xeroderma, the skin being harsh, rough, dry, and a large surface covered with branny scales. The The treatment recommended was alkaline baths, followed by glycerine inunctions, or by tarry applications to check all growth.

Dr. Smith, of Seaforth, brought before the Association, for examination, an interesting case of a young man, apparently in good health, but having an enlargement of the left testicle. The slightest pressure on this testicle excited most painful spasms, and continual manipulation rendered the organ so sensitive that the slightest touch would cause him to cry out. Directing the patient to lie with his face downwards, pressure along the spinal column caused no pain until the two lower dorsal vertebrae were reached. Slight pressure here caused spasms of tho left side. This had been thought to arise from the abnormal condition of this testicle. He had been treated with large doses of pot. brom. combined with pot. iodid. The question arose as to whether there was likely to be malignant disease of the testicle. But the length of time since he had first noticed the enlargement (four years) rendered this improbable. It was thought better to continue the treatment as above and not to resort to operative measures at present. Electrolysis was mentioned as likely to be useful in the case.

Dr. Worthington, of Clinton, presented an intractable case of ulceration of the leg, in an old gentlemen, for which the persistent wearing of a Martin bandage was recommended.

Dr. Elliott, of Brucefield, mentioned a case which had but recently occurred in his practice, in which a miscarriage was taking place, but the uterus being slow to throw off its contents, he had injected hot water at a temperature of 120° F., into Douglas' cul de sac, with the result that uterine contractions were excited so that the ovum was expelled without further delay.

Dr. Nichol, of Bayfield, reported a case diagnosed as enlargement of spleen, occurring in a man aged fifty, which he had first seen in July last. The treatment pursued had been all that was recommended in such cases, but nothing

seemed to be of any avail, and the patient died six months after the enlargement was first noticed. The enlargement reached to within a finger's breadth of the pubis, and about two inches over the median line of the abdomen. Dr. Smith, who had seen the case, agreed with Dr. Nichol's treatment, but expressed regret that a post mortem examination was not allowed.

Dr. Graham recollected a somewhat similar case, in which those who saw it diagnosed splenic enlargement, but the post mortem showed that it was a case of spindle celled sarcoma of the kidney.

Dr. Smith read the notes of a case of dilatation of the stomach, arising from cancer of the pylorus. A report of this case will appear in the next number of the LANCET.

A resolution of condolence expressing sympathy with Dr. W. Sloan, of Blyth, in the sudden death of his son, Dr. A. M. Sloan, of Listowell, was carried unanimously.

The following officers were elected for the ensuing year: Dr. W. Graham, Brussels, *President;* Dr. Young, Londesboro, *Vice-President,* Dr. Smith, Seaforth, *Secretary.*

BRANT MEDICAL ASSOCIATION.

A meeting of the Brant County Medical Association was held in Brantford on the 2nd ult. The follgwing members were present: Drs. A. J. Henwood (President), Philip, Griffin, Digby and Secord, Brantford; Dr. Addison, St. George; Dr. Sutherland, Paris; Dr. Dee, Onondaga, and Dr. Johnston, Burford.

Dr. Heath, Brantford, was elected a member of the Association.

Dr. Digby gave the details of a case of fracture of the pelvis and dislocation of the thigh.

Dr. Philip showed a specimen of fibroid tumour of the uterus, which he had recently removed, and gave the history of the case. He also reported a case of congenital torticollis in a child and described the apparatus employed.

A discussion took place upon the undue prevalance of typhoid fever and diphtheria at present in this city and county.

The notice of motion given at last meeting in reference to change of date of meeting was adopted.

Dr. Rosebrough, Hamilton, will read a paper at the next meeting.

The association adjourned to meet in Brantford on the first Wednesday in March.

Selected Articles.

SOME PRACTICAL SUGGESTIONS ON THE TREATMENT OF DIPHTHERIA.

Diphtheria is a common disase, and it is one of the most fatal. As one illustration of many, in five years there were 17,193 cases in New York alone and 7,293 deaths. It is a disease that every physician will be called to treat sooner or later, and being called must act promptly. This is not the place for a long essay upon the different theories of diptheritic contagion and progress; rather let us enter at once upon the discussion of the practical questions involved in conducting the disease to a favorable issue.

Let me very briefly sketch the manner of invasion according to conclusions which seem most reasonable and are by many accepted:

1. Diphtheria is contagious—or rather portagious, and of parasitic origin.

2. It is most readily implanted upon a mucous membrane denuded of its epithelium.

3. It is probably always local in its incipiency, sometimes becoming rapidly systemic, though in rare cases apparently systemic from the beginning.

To further explain rather than to argue these propositions, let me say that the best protection against diphtheria is a mucous membrane entirely healthy; and an ordinary acute or subacute laryngitis or pharyngitis is a condition favorable to the implanting of the diphtheritic germ. When the epithelial layer is intact the diphtheritic germ finds no foothold, but when there is an abrasion or denudation of the lining membrane, the diptheritic bacteria first attach themselves to the surface so prepared for them. This is the local period of the disease and no micrococci are found in the blood—there is no constitutional symptom. Sometimes, though there may be rapid surface evolvement, and free formation of the characteristic membrane, there may still be little absorption of the diphtheritic virus.

Many of these almost purely local conditions suggest a doubt as to their specific nature. It is well to give the patient the benefit of the doubt and to treat urgently all suspicious looking exudations upon the surface of the respiratory tract. Practically, a certain number of cases of diphtheria are constitutional from the beginning, the point of infection being in some recess of the naso-pharynx or larynx, and easily overlooked—or is beyond the range of vision. I am not sure but that in-

fection may occur from primary invasion of the membrane of the alimentary canal. Klebs, in the second Congress of the German Physicians, speaks of a diphtheritic evolvement of Peyer's patches, resembling the reticular appearance in the earlier stages of typhoid. In by far the greater number of cases the rapid multiplication of the bacteria—whether sphero-bacteria as are found in severe cases, or whether short and slender rods as in milder cases—produces an inflammation of the mucous membrane, exudation takes place, the epithelial cells die and the bacteria pass into the blood and rapidly multiply throughout the circuation. Even should we deny with Beale, that the contagium is bacteria, we still must admit that the hypothesis of local infection furnishes the most rational explanation of the sequence of symptoms.

Granting this, we have two purposes in treatment in the early stages of diphtheria :

1. To destroy or render harmless the local manifestation of the disease.

2. To increase the power of resistance in the general system to infection.

In dealing with the false membrane all measures which would tend to irritate or injure the air passages, should be avoided. There should be no tearing away of the exudation, or application of caustics—nor do I think that, except in cases where there is only a small, well defined patch of membrane, the use of the galvano-cautery will prove expedient. To prevent absorption, not only should we avoid making new abrasions in the throat, but I have thought it wise, as far as possible, to cover up those that already exist.

First of all, it is well to remove from the naso-pharynx, or pharynx, if that be the site of invasion, whatever of accumulated mucus and *débris* there may be. This may be readily done by means of a small syringe, and a weak solution of salt water, or of Listerine. This may be used either through the nostril or directly in the pharynx. To loosen the attachments and hasten the resolution of the diphtheric membrane many means have been advocated.

When the patch can be reached, a solution of papayotin may be applied ; or better still, one of trypsin. This last used in solution, as suggested by Fairchild and Foster, or still better, a few grains with one or two of bicarbonate of soda, made into a paste with water and spread upon the diphtheric patch, is the most rapid solvent I have known. If the local disease is beyond the reach of such an application, an alkaline solution of trypsin may be sprayed into the nose or larynx.

After several applications of trypsin within the hour, a still further attack may be made upon the local disease. Having used more or less freely most of the germicides, astringents and antiseptics commended in the treatment of diphtheria, I have abandoned all else for a solution of equal parts of the tincture of the chloride of iron and glycerine. I have cause to consider this, when well applied over the entire extent of the diseased surface, an almost complete bar to the progress and absorption of the diphtheric virus.

1. If the potency of the disease lies in the rapid multiplication of bacteria, so strong a chloride solution is certainly indicated.

2. If absorption takes place through the abraded surfaces and "mouths of lymphatics open," as stated by Oertel, we would from *a priori* reasoning, expect some good from the local use of iron, while the glycerine may be something more than a mere vehicle, in that it may by affinity relieve to some extent the turgid capillaries of the mucous membrane. The application should be made frequently.

Let me say, in urging the efficacy of this agent, that for two years I have not seen a case of diphtheria die where the whole of the false membrane could be seen and repeatedly covered with this solution and where appropriate general treatment was given. Thrice within the last week, and many times during the past year, I have seen the characteristic membrane shrivel up and become detached under the influence of the iron and glycerine.

When the local attack is out of reach of the direct application by means of the brush, or better still, the cotton covered probe, the case is very different.

When the invasion is in the naso-pharynx, or in the larynx, the result may well be dreaded. Even in such instances I believe the best procedure is to apply the iron locally by spray and where possible by the cotton covered probe.

The covering in of the diphtheritic patch with tolu varnish, as recommended by Mackenzie, may follow the thorough use of the iron solution, and is doubtless protective.

Not only is local treatment important, but it is important to institute it early. The physician should be called at once in every case where there is a doubt. Parents should feel that they are responsible for delay, and that delay is exceedingly dangerous. Many cases that during the first twenty-four hours are easy to treat and curable, are a little later beyond the reach of the most skilful.

A few words as to general treatment. Here, too, I have no sympathy with halfway measures. First of all, in every case, I nearly always counsel the administration of enough of calomel and soda combined to thoroughly evacuate the alimentary tract. It empties the canal of any accumulated material, it stimulates important secretions, and with Ritter, though not to the extent to which he advocates it, I believe it has a favorable influence upon the general condition. At least it clears the

decks for action. As soon as the bowels of the child have been well moved, and sometimes not waiting for that, the internal use of the iron and glycerine solution (the same as that used in the throat) may be begun; for we need not fear any chemical reaction. To show that others are falling back upon this well known agent, let me quote from an editorial in a recent issue of the *New England Medical Monthly:* "It is interesting and somewhat gratifying to note that after each excursion into the domain of experimental medicine, the profession invariably returns to the older and more effective method of treating diphtheria, which consists of tonic doses of the tincture of iron and a system of extreme nourishment."

To anticipate and antagonize general invasion, the general as well as the local treatment should be instituted early. Where the symptoms demand I prescribe two drops of the iron and glycerine solution for each year of the child's age, in a little water every two hours, and midway between each dose the diphtheritic patch is to be touched or sprayed with the solution. Thus there is an opportunity for the ferric solution to be brought in contact every hour with so much of the diseased membrane as is in the pharynx.

I have not discussed much of the poly-treatment of diptheria as practised to-day—nor have I time to outline the emergencies which may arise, as I had thought of doing. My object has been to propose a plain and direct method of treatment which anyone may use and which is not an experiment.

Many other remedies are often to be added. Pilocarpine, when the skin is dry and there is spasmodic laryngeal coutraction; quinine, when the fever is excessive; steam from slacking lime, when respiration is labored and the respiratory tract dry; and tracheotomy or intubation when the larynx is greatly obstructed.

Let me, in conclusion, suggest that the physician demand of the people among whom he practices, that they call him at once when suspicious symptoms are observed, and that he answer quickly, act promptly, and see that his instructions are implicitly obeyed. To treat diphtheria is to fight a battle—there should be no delays, surprises nor compromises.—*Dr. Porter, Jour. Am. Med. Asso.*

CHRONIC PURULENT OTORRHŒA; ITS NATURE AND TREATMENT.

A chronic purulent or muco-purulent discharge from the ear is usually the result of inflammation of the mucous membrane of the middle ear, and, as such, implies the existence of a perforation in the membrana tympani through which the purulent matter escapes into the external auditory canal. The perforation in the membrana tympani is usually in that part of the membrane below a line drawn nearly horizontally through the short process of the hammer—*i. e.*, in the so-called membrana vibrans. In some rare but very important cases, the perforation is in the flaccid membrane, or the membrane of Shrapnell, which lies above the short process of the malleus. Chronic otorrhœa is both common and important, is met by all practitioners of medicine, and demands, therefore, their careful attention, both on account of the annoyance its presence gives the patient, and the danger to hearing and life which lurks in its persistence in the middle ear. Chronic purulent otorrhœa generally begins in childhood. The original cause of otorrhœa is chiefly naso-pharyngeal, and Eustachian tubal catarrh, induced by coryza, teething, and the acute exanthemata. Teething, by inducing a reflex irritation in the middle ear, leads practically to catarrhal inflammation of that cavity, perforation of the drum membrane, and the establishment of a chronic running. Purulent inflammation of the middle ear is almost invariably preceded by pain, and often constitutes the cause of earache in children.

Among the causes producing purulent otorrhœa in adults, must be named swimming and diving in cold water, plunging the head under cold water, washing the head and allowing it to dry in a draught of air, and also the use of cold water in the nasal douche, and the inhalation of various patent powders, snuffs, and fluid preparations advertised for the cure of nasal catarrh.

Tuberculosis of the lungs is also a cause of subacute and chronic purulent otorrhœa. This form is characterized by little or no pain, by its tendency to affect the posterior and upper parts of the drum membrane and cavity, and by its resentfulness of all forms of treatment but the mildest. It is supposed to be due to reflex inhibition of vasomotor power in the arterioles of the ear, supplied by the carotids. The irritation which thus acts reflexly is in the diseased lung. The irritation, passing by the pneumogastric to the sympathetic system in the neck, inhibits influence over the carotids. Passive dilatation ensues in this vascular tract, and those parts of the membrana tympani and middle ear supplied by it, undergo passive congestion and inflammation of a low form, without much or any pain, the purulent matter ruptures the membrana, and an otorrhœa, chronic from the ouset, is established. The tendency to chronicity in all aural discharges is favored by the difficulty of keeping the ear clean, and by the improper treatment so often instituted. The exposure, too, of the mucous lining of the drum cavity to the atmosphere, by means of the perforation in the membrana, irritates the mucous membrane, and promotes further inflammation.

If chronic purulent discharge from the ear is associated with and kept up by chronic catarrh in the naso-pharynx and the nares, the rhinitis must receive due attention, or the discharge will not, without great difficulty, be checked. The natural tendency of chronic purulent disease in the drum cavity is to impair the hearing. After the destruction in the membrana, disorder in the ossicles, impairment of hearing, and the establishment of a chronic purulent otorrhœa, the disease may continue uneventfully on this plane for years.

These are the neglected cases, tending to the development of granulations and polypi *upon the mucous membrane of the cavity of the drum.* As these form in the diseased ear, the discharge increases in quantity, and the hearing grows duller. Inspection now reveals a polypus, or perhaps two, with distinct pedicles. Or, if these have not yet formed, granulations are seen, which more or less obscure a view of the drum membrane. Aural polypi vary in size, from a buckshot to a large marrowfat pea; or, if old, and sufficiently compressed by the auditory canal, they assume the shape of the latter, and finally extend from the meatus, after attaining a length of one and one-half to two inches. Instead of the formation of polypi, the purulent disease may be more destructive, and produce death of the muco-periosteal membrane in the drum cavity, and of the subjacent bone. The death of osseous tissue in the aural tract may take place in the tegmen tympani, just beneath the brain, or in the so-called antrum of the mastoid cells. When the tendency of this disease has brought about necrosis in the regions named, the affection has assumed a most serious aspect, because a fatal issue may now be induced at any time by either an embolic process in the brain, the lungs, or the liver. Prior to this course, a fatal meningitis may be set up by an extesion of the disease through the roof of the drum cavity, or through the fenestræ, and thus into the labyrinth and brain, or the necrotic disease having passed into the mastoid cells, the lateral or sigmoid sinus may be affected, and purulent phlebitis at this point aroused. A clot then may be formed in the sinus, pieces of which enter the circulation, and thus an embolic process established at some vital point.

In chronic otorrhœa, warnings of the unfavorable advance of the disease are given, by facial paralysis, violent ear pain, with fever and delirium, and inflammation within the mastoid cells. Facial paralysis indicates an invasion at the upper and back part of the drum cavity, and meningitis may ensue. Inflammation of the mastoid cells is more likely to be followed by phlebitis of the lateral sinus and its consequences. Cases of chronic otorrhœa with mastoid inflammation, and phlebitis of the lateral sinus, sometimes terminate fatally by embolism in the lung or liver, without any cerebral disease. Patients should be encouraged to have aural discharges stopped as soon as possible, whether acute or chronic. It is an injury to them to foster in their minds the idea that discharges will stop of themselves, or, if not, that they had better continue to run. Abnormal discharges from no other part of the body are allowed to run on disregarded, and, surely, discharges from the ear should not be, for they are as amenable to proper treatment as those elsewhere, and if neglected, may become serious. From the deep and peculiar situation of the drum cavity, purulent discharges from this part of the head are likely to be retained, and to undergo decomposition. This favors continuation and extension of the disease, and the muco-periosteal nature of the tissue in which the affection has its seat renders death of the subjacent bone imminent, with consequent involvement of the cranial cavity. The patient, therefore, should demand of his physician an intelligent consideration of such a malady.

Treatment.—The first consideration in the treatment of chronic purulent otorrhœa is cleanliness and cleansing. Cleanliness is demanded in order to prevent decomposition of the discharge in the ear, and septic influences from such a nidus. Cleansing the ear is necessary to enable the surgeon, to make a diagnosis of the condition of the fundus and the membrane and in order to prepae the ear for treatment.

Cleansing the ear is best accomplished by the surgeon, and should very rarely, if ever, be entrusted to the patient. It is best effected by syringing with tepid water, either with or without a disinfectant, if the discharge is copious and tenacious. If, however, the discharge is neither copious nor thick, the ear can be cleansed by a small dossil of absorbent cotton on the cotton-holder. Failure in this procedure is often attributable to the use of too thick a pledget of cotton. This should not be more than five centimetres in diameter. If it is larger it gets wedged in the meatus or in the canal, the fundus is not reached, or only with difficulty, and after pushing, which is painful to the patient, abrasion of the canal, or even of the deeper parts of the fundus and the membrana, may ensue. The syringe may be employed without illuminating the ear by the forehead mirror, but the proper and successful employment of cotton on the cotton-holder can be done only under the best illumination of the auditory canal by the forehead mirror. In infants and very young children, with very narrow meatuses, cleansing is most conveniently done by syringing with warm water, the return current from the ear being caught in a towel, held beneath the auricle. After syringing, the water must be carefully mopped out of the fundus of the canal by absorbent cotton, in order to gain a view of the diseased parts, otherwise the refraction of the water will give a very

distorted view of the objects seen through it. Cleansing the middle ear is furthered by using some form of inflation of the tympanum. After the first cleansing of the external auditory canal and its fundus, the surgeon should find out whether the perforation is above the so-called folds, of the membrana flaccida or below the folds, in the membrana vibrans. Sometimes a perforation exists in both these portions of the membrana tympani at the same time; but this is not common. It is highly important to determine in which of these parts of the drum membrane the perforation lies, since the treatment must be modified by the position of the perforation.

Let us first consider those cases in which the perforation is large and in the lower part of the membrana, the membrana vibrans. These are the most frequent. Earache from acute inflammation in the tympanic cavity, in such chronic cases of purulent otorrhœa, must be combated by gentle warm-water syringing or irrigation, and in protecting the inflamed mucous membrane with insufflation of powerded boric acid. These insufflations and all others can be done either with the blow-tube, on the principle of the blow-pipe, or by the hand powder-blower. In those cases of acute inflammation in chronic otorrhœa with large perforations in the membrana, the pain can often be allayed by the use of instillations of cocaine, because the perforation in the membrana permits the entrance of the solution into the drum cavity, and its ready contact with the mucous membrane. Cocaine solutions instilled into an ear with imperforate membrana tympani are impotent to quell pain in the ear. They also seem valueless even when the membrana contains a small perforation, because they still seem to fail to reach the inflamed mucous surface. If coryza is present, as it is apt to be, in these acute attacks in chronic otorrhœas, it, of course, must not be disregarded. The prognosis in these cases is favorable as to restoration to a relatively normal or healthy state, if the subject is in ordinary health.

It is in these cases of purulent otorrhœa with large perforations in the membrana tympani, that preference should be given to the so-called dry treatment. In this form of treatment very little water is used for cleansing, and only when the discharge is thick and copious, and hence not easily removed by absorbent cotton. The reason for this preference of dry treatment is that the use of water favors the continuance of the discharge charge in many cases, promotes a tendency to the formation of granulations and polypi. If syringing the ear is to be done, it must be carried out by the surgeon, and not entrusted to the patient. After the ear is cleansed by either of these methods, some form of boric acid, finely powdered, should be employed by insufflation. This enters the tympanic cavity, and hence comes in direct contact with the inflamed mucous membrane. It remains there more readily than fluid preparations and hence acts longer. The beneficial effects are due to the antiseptic properties of the boric acid, and to the protection the layer of powder gives to the mucous membrane. If this dry treatment does not give entire satisfaction, as it may not or will not if granulations or ulcerations exist beyond the reach of the powder thus blown in, resort may be had to instillations of astringent and antiseptic solutions, as silver nitrate—not less than forty grains to the fluidounce of water; or carbolic acid solutions from three per cent. to five per cent. in strength. These are to be put in the ear after it is cleansed, and followed by a dressing of insufflated boric acid, either in simple or in compound powder.

In cases of chronic purulent discharge from the attic of the tympanic cavity, with perforation only in the membrana flaccida, the dry treatment cannot be relied upon, because of the smallness of such perforations, and the consequent inability of the surgeon to blow the powder into the diseased cavity. In these cases the treatment consists in the application of solutions to the attic, through the perforation, by means of the tympanic syringe. The long slender nozzle, six centimetres long by one millimetre in diameter, must be conveyed, under illumination by the forehead mirror, down the auditory canal to the seat of disease. I have found the best results to follow the use of injections of a three per cent. solution of carbolic acid, by this means, into the attic cavity of the tympanum after thorough cleansing of the attic by injections of hydrogen dioxide, which thoroughly removes all pus. They do not tolerate nitrate of silver. It is well to follow these applications by insufflations of boric acid into the fundus of the auditory canal. For, though they cannot reach the attic unless the perforation be large, they have an antiseptic effect about the perforation and the rest of the outer surface of the membrana tympani and the fundus of the canal.

Cases of chronic purulent disease in the attic are difficult to treat, on account of the bad drainage from those parts above the ossicles, and because of the small perforation usually found in the membrana flaccida. They are also dangerous to the life of the patient, because the disease lies near the tegmen tympani, directly beneath the brain. Natural deficiencies in the bone at this point exist so frequently, that the meninges and the mucous membrane of the roof of the drum cavity are often in apposition.

In order to facilitate better drainage of purulent secretions from the attic in chronic disease, and more efficient medication, especially by the insufflation of powders, Dr. Sexton has suggested, and frequently performed, when the membrana is largely destroyed, an operation for its removal, and then that of the malleus and incus, or their remnants.

The fundus is then treated with a powder of salicylic acid and boric acid, until a dermoid cicatrization ensues. This operation is applicable to chronic attic disease, *without perforation of the membrana flaccida*, but with large destruction of the membrana vibrans, in which the diseased malleus and incus interfere with drainage of the attic, downward into the atrium. In any case of chronic purulent otorrhœa, so long as we can detect no lesion beyond impaired vibration in the ossicles, with defective hearing, as a consequence of the chronic disease in the mucous membrane, the cure of the affection may be considered as probable, excepting in tubercular cases far advanced in pulmonary disease. By curing the purulent disease of the mucous membrane, the growth of granulations and polypi, and the occurrence of necrosis and caries of the adjacent bone, are prevented. If, however, the ear has not been treated, or improperly treated, granulations and polypi may be found, with impairment of the hearing. The granulations are best removed by touching them, and only them, with chromic acid, carefully conveyed to their surfaces on a small cotton tuft, not more than two millimetres in diameter, on the cotton holder, under perfect illumination of the canal and fundus by the forehead mirror.

If polypi, with distinct pedicles, have grown from the mucous surface of the middle ear, and extend into or from the perforation in the membrane, they must be extracted with the polypus snare, and their pedicles touched every day or two, until they disappear. These are entirely curable, and the discharge from the ear usually ceases after the removal of the polypus and the destruction of its roots, and the hearing improves. The removal of the polypus, without subsequent treatment and destruction of its pedicle, is useless. Instead of this conservative, hypertrophic action, on the part of the mucous membrane, it may slough, leaving the subjacent bone bare. The latter then dies, either superficially or in its profounder parts, and some of the evils I have sketched are experienced by the patient. In some cases of profound inflammation and ulceration of the mucous membrane of the drum cavity, denuded bone can be felt with a probe, and crumbs of bone are thrown off with the aural discharge. But with the improvement in the condition of the ear, these particles of dead bone cease to appear, and denuded bone can no longer be felt. In such cases the ear should be syringed once daily, by the surgeon, with tepid water, in which salt or potassium permanganate may be placed. Or the ear may be syringed with weak solutions of corrosive sublimate, 1 : 1000, carbolic acid five per cent., or with undiluted hydrogen dioxide. This drug has the great advantage in breaking up and removing all pus, and of informing the surgeon when this is accomplished, by the cessation of foaming, which ensues as soon as there is no more pus, with which it makes the frothy reaction. Thereafter the ear is to be dressed with the powder of boric acid already named. Cleanliness and antiseptics, with attention to the general condition, form the guiding motives in the treatment. If sequestra form, they should be removed if possible.

In many cases, indeed, I am inclined to say in most cases, necrosis of the temporal bone from chronic aural purulency, operative interference is well-nigh useless. Unless it be the mastoid cortex, all other parts of the auro-temporal surface are extremely difficult to operate upon, and surgical interference becomes a dangerous undertaking. Again, when the surgeon is consulted in cases of intracranial disease, or systemic septicæma, arising from chronic purluent disease and necrosis in or about the ear, the patient is beyond aid. To trephine for cerebral abscess, which has resulted from chronic aural disease, is to operate on a moribund patient, and to hasten surely the fatal issue. The time to aid such a sufferer was when the chronic purulent otorrhœa could have been checked, and before it had induced necrosis of bone, or embolism. In my opinion, there never is a moment, after the cerebral abscess is formed, that an operation for its relief is justifiable, excepting, perhaps, in those instances in which a sinus can be found leading to it from the mastoid or squama. In regard to mastoid trephining, for so-called mastoiditis and periphlebitis of the lateral sinus, my opinion is much the same.

A chronic purulency in the tympanic cavity may gradually and painlessly affect the mastoid antrum, its cells, and its outer cortical as well as its inner wall, the latter being the outer wall of the lateral sinus. This diseased state in the furrow of the lateral sinus is of the most serious import, but an operation on the mastiod cortex cannot arrest its progress or remedy its effects. Too often, when pain in the region of the mastoid is felt, and other well-known symptoms of so-called mastoiditis arise, the pain is really due to inflammation in the lateral sinus, or deeper parts, from such chronic disease in the bone, and not to matter pent up in the mastoid cells, which a perforation in the mastoid can relieve. I am forced to such conclusions, because fluid matter from the drum cavity and mastoid antrum can escape, in most cases, from the external ear. Also, because in many cases of pain in and about the mastoid, with symptoms which are supposed to justify trephining its outer cortex, the cavity has not been found filled with fluid matter seeking an escape, but with some inspissated pus at most; while periphlebitis in the lateral sinus has been discovered, having its origin from the neglected tympanic disease, which trephining is powerless to cure. Even if the mastoid cortex and cavity are found diseased, an operation upon them will do no

good if the lateral sinus is diseased, and perhaps the seat of a clot. In many cases of tumefaction behind the ear, in painful acute inflammation in chronic cases, Wilde's incision does give great relief. And in some such cases where this incision has been followed by perforation of the bone, and relief and apparent cure have followed, it has been because there was no disease in the inner mastoid wall and the lateral sinus. In such cases the local depletion gave the relief, and the mastoid perforation was purely gratuitous. Hence, in acute cases of otitis media, great care should be taken not to resort precipitately to mastoid trepanation. In chronic cases it is of value in very few instances, and the indications for its employment are not well defined. In many cases the mastoid becomes œdematous, brawny, shining, sensitive to both deep and superficial pressure, and painful to the patient. These are often relieved by poulticing and leeching, without even Wilde's incision. Sometimes, if let alone, they undergo speedy resolution. If the lateral sinus has not been invaded, there is no need of haste. If it has been attacked, mastoid trephining will certainly not check it.

It must not be forgotton that many instances of pain and swelling about the mastoid are due to congestion and swelling in its mucous lining, and in that of the middle ear and mastoid antrum. The circulation both within and without the mastoid is then impeded, and swelling, œdema, and tenderness of its outer surface are the result. Hence, the relief obtained sometines by spontaneous resolution, or by artificial depletion over the cortex of the mastoid.—Dr. Burnett, in *The Polyclinic.*

FEEDING AFTER SURGICAL OPERATIONS.

The experience which I have endeavoured to reduce to practical form, on the subject of nourishing patients after surgical operations, has been derived chiefly, of late years, from what I have done and seen done in abdominal surgery and in the various gynecological operations. I believe, however, that the subject is one of interest, not only to the general surgeon, but also to the general practitioner. The surgeon should not consider his responsibilities at an end with the performance of a given operation, but should extend his care and supervision to all the details of the after-treatment, the first and chief of which is the proper nourishment of the patient until convalescence is established.

After all capital operations, especially those involving wounds of the peritoneum, the question of nourishment is one of vital importance; and by nourisnment may here be understood the use of both stimulants and food. The administration of stimulants in case of shock or collapse, hypodermically or otherwise, need not be considered in this connection. Let us suppose, for example, that the operation of ovariotomy has been performed, and that the patient has rallied from the anæsthetic. The question arises, When shall food and stimulants be given, of what shall they consist and how and when shall they be administered, in what quantity, and with what frequency?

My own opinion is that nothing whatever should be given for the first twenty-four hours, except, perhaps, a very little water, unless the patient is very weak, in which case a little brandy may be added. If there is a tendency to vomiting it is better to give the stomach and the alimentary canal *absolute rest*, and even a teaspoonful of water or a morsel of ice, especially the latter, will sometimes be sufficient to excite peristalsis and disturb that rest. If the retching is persistent, and something must be given to combat it, very hot water in small quantities often answers well. After twenty-four hours, if vomiting continues a little black coffee, strong tea, iced champagne, or koumyss may be cautiously tried. If they are rejected it is best to wait two or even three days. Occasionaly a patient's fancy may be indulged as to what will, as the phrase is, "settle the stomach." I have known lager beer to be retained when everything else had been tried in vain. When the stomach will retain food, it is well to begin with koumyss, in half-ounce doses, repeated every two hours. If the patient is thirsty, an equal quantity of water may be given in the intervals. In place of koumyss there may be given peptonized milk, milk and lime-water in equal parts, or milk and Vichy, or clear beef-tea, or water in which the white of an egg has been mixed, or barley-water. Whatever is given should not exceed in bulk half a fluidounce. When the stomach is very irritable only one or two fluidrachms should be given at first. Where none of these things agree, brandy, or whisky, or champagne sometimes answers well. As the stomach bears it, whatever is found to agree best in the way of food is administered at longer intervals and in larger quantity. It is impossible to rule lay down one for all patients. Those who are stout and robust bear abstinence from food much better than those who are weak or anæmic, but even the latter suffer much less than is often supposed from two or three days of fasting.

It will be found, as a rule, that after prolonged anæsthesia the stomach is proportionately longer in recovering its tone. The object aimed at during the first ten days is to sustain the patient's strength with food which will leave the smallest residue in the alimentary canal, which will not cause flatulence, and which will be as far as possible agreeable to the patient. Koumyss or peptonized milk will answer these indications in a larger number

of cases than any other form of food. The German operators, Hegar among others, depend chiefly upon small quantities of water and sour wine for the first three days. Where patients have a marked aversion to milk or any of its preparations, clear, freshly made beef-tea may be substituted for it. The administration of stimulants is generally necessary only until food can be digested, and when that point is reached they may safely be discontinued, unless the patient is very feeble. In private practice, or where the patient is not entirely under the control of trained and obedient nurses, it is very difficult indeed to secure absolute rest for the alimentary canal. As a rule, overfeeding and overstimulation are much more to be dreaded than the reverse.

The method of nourishment described is subject to variation according to the amount of pain, the quantity of morphia administered, and any rise in temperature. After four or five days have passed without any bad symptoms, and the bowels have moved, food may be increased in quantity, great care being exercised until the end of the second week. During the second week stale bread may be given with milk or other nourishment, but no other solid food. Vegetables and fruit are to be especially avoided, and even soup or broth having vegetables cooked in it. Rectal alimentation should be resorted to early if the patient is very weak or the stomach very intractable. Stimulants may be given in this way early, using strong beef-tea as a vehicle. Half an ounce of brandy, two ounces of beef-tea, and ten grains of quinine, given every three or four hours, often proves of great value in extreme debility. Where the stomach continues to reject food, systematic rectal alimentation should be resorted to after the second day. I have not much faith in milk in this form of nourishment, but prefer some preparation of beef. Strong beef-tea peptonized, beef peptonoids, and the preparations of blood, all have their value. In critical cases, where nourishment by the rectum is the chief dependence, I have found nothing so satisfactory as a mixture of the pulp made by scraping raw beef with half of its bulk of pancreatic emulsion (Savory & Moore's). This mixture is allowed to stand in water considerably below the boiling-point until it assumes a homogeneous chocolate-like appearance. It should be prepared freshly each time, and two fluidounces of it administered not oftener than every four or five hours. It should be carried carefully, by means of a small flexible tube, well above the internal sphincter, and injected very slowly with a hard rubber syringe, gentle pressure being maintained for some time after the syringe is withdrawn to prevent its rejection. If quinine or opium is indicated, it may be given in the emulsified beef, but it is better not to add to it alcohol in any form. This method of nourishment, carefully carried out, may be made to sustain and increase the patient's strength, if necessary, for two weeks or longer, the stomach having in the meantime, absolute rest. The thirst which is often complained of when the stomach is empty may be allayed by throwing into the rectum four or five ounces of tepid water as often as may be required. The points which I have endeavored to emphasize are these :

I. That personal attention should be given, with precise directions, to the nourishment of patients after all surgical operations, and that too much should not be intrusted to nurses who can have no means of knowing the varying requirements of individual cases.

II. That vomiting is to be avoided by every means in our power, even if it require absolute rest for the stomach for several days.

III. That even appropriate food, where it can be borne, should be given only in very small quantities, and at regular intervals.

IV. That systematic nourishment by the rectum should be resorted to promptly if other means fail or are insufficient.

V. That less food and more water should be given if the patient suffers from fever.

VI. That the dangers caused by vomiting, by flatulence, or by food difficult of digestion, are much more to be dreaded than those due to abstinence from food.

VII. That stimulants are of great value where needed to meet special indications, but may be generally discontinued.—Dr. Hunter in *Med. Rec.*

MANAGEMENT OF TYPHOID FEVER.

Dr. Porcher describes, in the New Orleans *Med. and Surg. Jour.*, his plan of treating typhoid fever.

In addition to the keeping up of the nutrition of the patient by suitable food, and supporting by stimulants, he regards it as a matter of great importance to control the temperature, which he does by the following means :

1. A soft towel, folded, is soaked in a basin of iced water, then wrung out and applied over the forehead and temples.

2. The palm of one hand and the arm are "sponged off" with another towel, which has been dipped in the cold water and wrung out.

3. The towel which has been left upon the head is turned and re-applied, so as to have the cold surface next the skin.

4. The other hand and arm are treated as was the first.

This process, strictly followed, is continued for fifteen to thirty minutes, or until such time as the surfaces treated have become thoroughly cooled, and should be repeated whenever there is a rise of the surface heat. Sometimes, if it does not cause fatigue, both hands and arms, if hot and dry, are

allowed to be immersed or to be bathed directly in the cold water.

This mode of using cold water, he has found efficient and valuable in the treatment of various forms of fever in which the hyperpyrexia was of such a degree as to be regarded an element of danger.

The next most important auxiliary, and one that he regards as essential in every form of fever, is what he calls the "fever mixture," which is composed as follows, though the different ingredients may be varied to suit the case :

℞—Spts. etheris nitrosi, ... ℥ss.
Potass. acetatis, ... ℥i-ij.
Potass. chloratis, ... ℥j.
Liq. ammon. acetatis, ... ℥j.
Tr. aconiti, ... ℥ss.
Tr. opii camph., ... ℥ij-iij.
Aquæ, q. s. ad . . . . . ℥iv.

M. Sig.—Dessertspoonful every two or three hours, as long as there is fever.

Potassium bromide or morphia may be added, if there is great restlessness and insomnia.

Following the recommendation and experience of Dr. L. Kesteven, of Queensland, as recorded in the *Practitioner*, he has in his latest cases given the following formula in alternation with the "fever mixture" already given :

℞—Olei eucalypti, ... ℥v.
Spts. ammon. arom.,
Spts. chloroformi,
Glycerini, ... āā ℥ij.

M. Sig.—Teaspoonful every four hours.

Dr. Porcher generally gives tonic doses of quinine (two grs. three times a day). This has also an antiseptic influence he thinks. The quinine was generally associated after the first week with aromatic sulphuric or nitro-hydrochloric acid in ten-drop doses, in view of the special applicability of acids in this disease when it has made some progress.

In the later stages, characterized by dry tongue and sordes with low muttering delirium, he says that stimulants should be administered *very freely*, together with the application of revulsives (emplastrum cantharidis) to the back of the neck where cerebral complications, delirium, etc., are marked. *As long as the tongue is dry* he would give almost unlimited discretionary powers to attendants and nurses to continue stimulants. He thinks this positive indication has been too little regarded.

He further refers to some remedial agents which are valuable in the complications which arise in this disease.

Oil of turpentine is applicable to meet four separate morbid conditions.

1. Tympanitic distension resulting from perverted conditions of the mucous and secretory surfaces of the intestinal tract.

2. As a special stimulant at the stage of general depression.

3. As an astringent or styptic with opium to prevent or arrest hemorrhages from the intestines, kidneys or bladder.

4. Combined by means of mucilage with the carbonate and chloride of ammonium to relieve the irritation or inflammation of the bronchial tubes when these are affected.

When the later stage of the disease is complicated with severe broncho-pneumonia, the following formula has given him satisfactory results :

℞—Vin. ipecac., ... ℥j.
Ammonii carb., ... ℥ij.
Ammonii chloridi, ... ℥iij.
Syr. Simplicis, ... ℥j.
Aquæ, q. s. ad . . . . . ℥vj.

M. Sig.—Dessertspoonful every two hours in a wineglassful of water.

Cotton batting over the whole chest, covered with an oil-silk jacket, he has found most valuable additional means in treating broncho-pneumonia.

For the albuminuria which sometimes occurs, he gives three times a day two grains each of gallic acid and quinine.

For nausea and vomiting he finds most efficient drop doses of wine of ipecac. frequently repeated, or the following :

℞—Acidi carbolici, ... gtt.j.
Glycerinæ, ... ℥j.
Tr. opii camph.,
Ess. menth. pip.,
Chloroformi pur., ... āā gtt v.

M. Sig.—In mucilag. acaciæ q. s. and repeat.

Dr. Porcher claims that under this plan of treatment which he has pursued for a number of years, the mortality from typhoid fever in his clientele has been only two to three per cent., a record which is certainly a most emphatic endorsement of his treatment.—*St. Louis Courier of Med.*

FEEDING INFANTS.

Dr. Taaffe, after condemning the practice of either feeding or nursing infants too frequently, gives the following directions : "No infant at the breast, or who is being brought up by hand, should be fed more than once in *three* hours during the day, and twice in the night ; after five months old every *four* hours in the day and twice in the night. If brought up by hand, the food should consist only of milk and water, to be sucked from a bottle. For the first day or two (after birth) the proportions should be : milk, one-fourth ; water, three-fourths. After the first day or two, and up to two months old, milk, one-third ; water, two-thirds ; from two to four months old, milk and water in equal parts ; from four to seven months old, milk two-thirds,

and water one-third. A dessert-spoonful of sugar-of-milk may be added to each bottle."

We have copied these directions from the otherwise excellent address of Dr. Taaffe, not because they are new, for they are substantially the same as have been given by many writers, and which mothers and nurses have endeavored to execute in their care of infants for half a century at least, but because careful clinical observation over a wide field of practice long since taught us that they contained an error of very great practical importance, namely, the excessive *dilution* of the food of infants. Our attention was attracted to this subject at an early period, and more than thirty years since, in addition to careful clinical observation, we prosecuted investigations, chemical and microscopical, concerning the mother's milk in healthy uncomplicated lactation and also when complicated with menstruation and pregnancy.

Suppose, in applying the rule given by Dr. Taaffe, we commence the day-feeding of a child under two months old at 6 a.m. and end at 9 p.m. and add two feedings for the night, it would allow eight feedings every twenty-four hours. If we allow four ounces for each feeding, which is a large allowance for an infant of less than two months, it would get thirty-two ounces per day of twenty-four hours; four ounces of which would be nutritive matter, and twenty-eight ounces water if it were good mother's milk, and a fraction more if it were good cow's milk. If we may suppose the infant able to appropriate the whole four ounces in the twenty-four hours and lose in the same time by eliminations or waste two ounces, it would grow, or gain in weight, two ounces per day, or at the rate of nearly four pounds per month. But if we comply with the rule and make the milk two parts water to one of milk and still allow the infant four ounces each feeding, or thirty-two ounces per day, instead of four ounces of nutritive material and twenty-eight of water it would have received only $1\frac{1}{3}$ ounce of nutritive matter to $30\frac{2}{3}$ ounces of water; and if, as in the former supposition, the infant lost by elimination or waste two ounces per day, instead of gaining an aggregate of near four pounds per month it would actually have lost one pound and a quarter during that time. And such has been the actual tendency of every attempt we have seen made to literally adhere to the rules given by Dr. Taaffe, although many such have come under our observation during the preceding thirty years.

We have seen scores of these little sufferers soon restored to the condition of quiet, cheerful, thriving babies by simply insisting on their being fed with milk containing the full natural proportion of solid elements, and sometimes slightly increasing these by either boiling enough to evaporate some of the water, or by adding a very little wheat-flour and a few grains of salt while the milk was boiling. The child thus getting enough nutritious material to supply the demands of its tissues in a less bulk of water yet easy of absorption and assimilation, avoiding over-distention of the stomach, takes long, quiet sleeps, and grows fat and happy. —*Jour. Am. Med. Association.*

MEDICAL NOTES.

A case of *melanæmia* was treated thus: Saturate patient with iron, using the tartrate of iron and potassium, commencing with gr. v and increase to gr. xx ter die. (Prof. Da Costa.)

For *gastralgia* Prof. Da Costa advised an exclusive milk diet and the following:

℞ Ext. cannabis indicæ, . . . gr. $\frac{1}{8}$
Sodii arseniatis . . . . . gr. $\frac{1}{10}$
Ft. pil.
Sig—Ter die.

Prof. Da Costa treated *tinea tonsurans* with the following:

℞ Hydrarg. chlorid. corros. . . gr. iv
Glycerini . . . . . ʒ ij
Aquæ . . . . . ʒ vj M.
Sig.—Wash parts three or four times daily.

After about three weeks' treatment with ʒss. of ext. ergot. fl., afterward increased to a drachm ter die, a *fibroid of the uterus* was found to have been reduced in size one-half inch, umbilical measurement. The case was shown by Prof. Parvin.

For *constipation:*

℞ Ext. aloes . . . . . gr. iij
Ext. belladonnæ . . . . . gr. $\frac{1}{4}$
Ext. nucis vom. . . . . gr. $\frac{1}{4}$
Ft. pil.
Sig.—Ter die (Bartholow).

Constipation occurring in those of a hysterical type, Prof Bartholow often treats with the pil. aloes et assafœtidæ.

To promote *diuresis* the following will prove effectual:

℞ Potassii acetat. . . . . gr. xx
Tinct. zingiberis . . . . . gtt. x
Elix. simplicis . . . . . ʒ j
Aquæ q. s. ʒ ij M.
Sig.—Every three hours (Da Costa.)

Prof. Bartholow states, that it is said that a one to two per cent. solution of carbolic acid hypodermatically will do good in arresting advancing *erysipelas.* Its action, no doubt, is due to the destruction of the organism upon which the disease depends. Do not use in the facial form.

In a recent clinic Prof. Da Costa presented to the class one of those rare cases known as Raymond's disease or vaso-motor spasm. The man had swollen fingers, blue and painful, the same thing

existing in the toes. When parts are moved the pain lessens. Blood had oozed from under the nails—the heart was irregular in rhythm, and also there was found a slight amount of albumen in the urine. Being a disease of the nervous system, the following plan of treatment was advised :

℞ Tinct. digitalis . . . . . gtt. x
Sig.—Ter die. Increase to gtt. xv.

Also—

℞ Pil. phosphori . . . . . gr. $\frac{1}{100}$
Sig.—Ter die.

If this is not borne well, give the dilute phosphoric acid.

In *cerebral anæmia*, caused by disordered digestion, following a fever, Prof. Da Costa directed the following :

℞ Acid phosphoric, dil. . . . gtt. xx
Aquæ
Syrup. āā q.s. ad f℥j M.
Sig.—Ter die.

Also—

℞ Strychninæ sulph. . . . . gr. $\frac{1}{60}$
Sig.—Ter die.

The following course of treatment was laid down by Prof. Da Costa in a case of pericardial adhesions, *mitral stenosis*, with an accompanying passive congestion of the abdominal viscera :

℞ Tinct. digitalis . . . . . gtt. x
Tinct, cannabis indicæ . . . gtt. iij
Tinct. cinchonæ comp. . . . ℥j M.
Sig.—Ter die.

A drachm of Rochelle salts to be taken occasionally ; if ineffectual, resort to massa hydrarg.—*Col. & Clin. Record.*

A Sure Cure for Diphtheria Again.—We feel that perhaps an apology is due to our readers for bringing to their notice another of the many methods of treating diphtheria, which are always said to be so successful in the hands of their advocates, but which, for some reason or another, often fail to yield satisfactory results when employed by others. But the therapeutic nihilists must not be allowed to have the ascendancy always; and, indeed, some of the methods recommended in recent years, though not specifics, have proved to be very serviceable, and it was not impossible that others may yet be proposed which may be found to be of even greater value. It is, therefore, worth while to consider any new plan of treatment that may be brought forward, or to note any remarkable series of successes which have followed the employment of old methods.

Dr. A. Brondel writes, in the *Bulletin Général de Thérapeutique* of November 15, 1886, concerning the treatment of diphtheria by benzoate of sodium, and asserts that of two hundred consecutive cases he has not lost a single one. He admits the possibility of a mistaken diagnosis in some instances, but even excluding fifty per cent. on this account he still has one hundred cases without a death. His method is as follows : Every hour the patient takes a teaspoonful of a solution of benzoate of sodium, fifteen grains to the ounce, and at the same time one-sixth of a grain of sulphide of calcium in syrup or granule. In addition to this, the throat is thoroughly sprayed every half-hour with a ten per cent. solution of benzoate of sodium. This is done religiously at the regular intervals, day and night, but no other local treatment is employed ; no attempt is made to dislodge the false membrane, and no pencilling nor painting of the fauces is resorted to. Tonics are given and antipyretics are used when occasion calls for them. Nourishment consists of beef-juice, tender rare meat, milk, etc., but bread and all other articles which may cause irritation of the throat are forbidden. The sick room is kept filled with steam from a vessel containing carbolic acid, turpentine, and oil of eucalyptus in water.

The employment of benzoate of sodium is not a new method in the treatment of diphtheria ; for it has been tried, and is recommended highly by Letzerich, Kien, Ferréol, and others. But this, of course, speaks so much the more strongly in favor of the remedy ; and as Dr. Brondel's results were better than those obtained by others using the same drug, it is to be presumed that his method of employing it is the best.—*Med. Record.*

The Effect of Retained Membranes on the Puerperal State.—Dr. Fischer, of Professor Slavianski's clinic, writing in a recent number of the *Vrach*, gives the result of a number of observations made for the purpose of testing the commonly received view that portions of membrane retained in the uterus after the expulsion of the placenta are liable to produce serious consequences—as hæmorrhage and especially the so-called auto-infection or septicæmia—and that therefore it is of the utmost importance that they should be removed by the hand or by intra-uterine injections. This view is supported by the authority of Winkel, Dohrn, Ahlfeld, and others ; while Olshausen, Credé, Weiss, and Landau consider that there is little harm in the retention of even considerable portions of the chorion. Dr. Fischer's observations extended over 682 labors, in each of which he carefully examined the after-birth. In forty-two of these cases (*i.e.*, 6.2 per cent.) a portion of the chorion was retained. Credé's method of manipulating the fundus uteri gave the best results regarding the percentage of retention. In primiparæ retention was nearly twice as frequent as in multiparæ, the percentage being 9.1 and 4.9 respectively. Some effect appeared to be exerted by the time at which the rupture of the amnion took place, which,

when either too early or too late, seemed to predispose to retention. Premature deliveries also were rather more frequently followed by retention than those at term. As a rule, the retained chorion came away in the course of from four to six days, generally in several small portions, sometimes, however, in fragments of considerable size, and in one case, where three-quarters of the chorion had been retained, it was passed entire on the fifth day without having caused either hæmorrhage or sepsis. Amongst the forty-two cases hæmorrhage occurred only four times, and was always easily arrested either by hot irrigation or by ergot and manipulation of the uterus. When, however, we learn that out of the forty-two cases manual extraction of the fœtus was required seven times, and that a considerable loss of blood occurred during the third stage eleven times, four cases of slight post-partum hæmorrhage does not appear at all excessive. With regard to pyrexia, in twenty cases, or 47.6 per cent., there was none; in twelve, or 28.6 per cent. the thermometer, which was always used thrice a day, once registered a rise above normal; and in ten, or 24.8 per cent., there was more or less pyrexia. In order to compare these with cases in general, Dr. Fischer gives the results of similar observations made on all the cases he has attended for the last two years. These show that there was no pyrexia in 58 per cent., that the temperature was only once above normal in 17.6 per cent., and that there was pyrexia in 24.4 per cent; so that the ratio of appreciable pyrexia was about the same in the cases in which retention occurred as in ordinary cases. A slight amount of endometritis occurred in three out of the forty-two cases. Dr. Fischer concludes from his observations that there is no ground for supposing that retention of fragments of membrane gives rise to "auto-infection," and considers that the commonly received view is fraught with danger, inasmuch as it tempts the accoucheur, when sepsis occurs, to throw the blame, not on himself, as he ought to do, but on some fancied auto-infective process, and thus probably prevents his being as particular as he should be in employing antiseptic methods in the management of the labors he has to attend.—*Compend. Med. Science.*

DIAGNOSIS OF INFANTILE DISEASES. — 1. Congestion of the cheeks, excepting in cases of cachexia and chronic disease, indicates an inflammation or a febrile condition. 2 Congestion of the face, ears, and forehead of short duration, strabismus, with febrile reaction, oscillation of the iris, irregularity of the pupil, with falling of the upper lids, indicates a cerebral affection. 3. A marked degree of emaciation, which progresses gradually, indicates some subacute or chronic affection of a grave character. 4. Bulbar hypertrophy of the fingers and curving of the nails are signs of interference in the normal functions of the circulatory apparatus. 5. Hypertrophy of the spongy portions of the bones indicates rachits, 6, The presence between the eyelids of a thick and purulent secretion from the Meibomian glands may indicate great prostration of the general powers. 7 Passive congestion of the conjunctival vessels indicates approaching death. 8. Long-continued lividity, as well as lividity produced by emotion and excitement, the respiration continuing normal, are indicative of a fault in the formation of the heart or the great vessels. 9. A temporary lividity indicates the existence of a grave acute disease, especially of the respiratory organs. 10. The absence of tears in children four months old or more suggests a form of disease which will usually be fatal. 11. Piercing and acute cries indicate a severe cerebro-spinal trouble. 12. Irregular muscular movements, which are partly under control of the will when the patient is awake; indicate the existence of chorea. 13. Contraction of the eye-brows, together with a turning of the head and eyes to avoid the light, is a sign of cephalalgia. 14. When the child holds his hand upon his head, or strives to rest the head upon the bosom of his mother or nurse, he may be suffering from ear disease. 15. When the fingers are carried to the mouth, and there is, besides, great agitation present, there is probably some abnormal condition of the larynx. 16. When the child turns his head constantly from one side to the other, there is a suggestion of some obstruction in the larynx. 17. A hoarse and indistinct voice is suggestive of laryngitis. 18. A feeble and plaintive voice indicates trouble in the abdominal organs. 19. A slow and intermittent respiration, accompanied with sighs, suggests the presence of cerebral disease. 20. If the respiration be intermittent, but accelerated, there is capillary bronchitis. 21. If it be superficial and accelerated, there is some inflammatory trouble of the larynx and trachea. 22. A strong and sonorous cough suggests spasmodic croup. 23. A hoarse and rough cough is an indication of true croup. 24. When the cough is clear and distinct, bronchitis is suggested. 25. When the cough is suppressed and painful, it points towards pneumonia and pleurisy. 26. A convulsive cough indicates whooping-cough. 27. A dry and painless cough is sometimes noticed in the course of typhoid and intermittent fever, in difficult dentition, or where worms are present.—*Dr. Bradley in L'Union Médicale du Canada.*

TREATMENT OF VARICOSE VEINS.—In the *Lancet*, Surg.-Major Stevenson draws attention to the very effective manner in which the cure of varicose veins is brought about by the injection of pure carbolic acid. This treatment consists in the injection of one minim of pure carbolic acid at different situations into the enlarged veins, having previously cut off the circulation from the limb by means of

an elastic bandage placed above the highest point of puncture. Before operating, the patient should be directed to stand erect for about two minutes, in order to allow the veins to become distended. An Esmarch tube should then be passed round the thigh one and a half times, sufficiently tight to stop the superficial venous circulation; then in about a minute the remainder of the tube should be applied, so as to cut off all circulation from the limb. Injections of one minim of pure carbolic acid are then made into the veins at about one inch and a half apart, beginning at the upper end of the vein. A little pledget of carbolised cotton-wool is placed over each puncture as the needle is withdrawn, and well soaked with collodion. The elastic bandage should not be removed until fifteen minutes after the last injection, and great care must be taken to remove it very gradually. For at least a week after the operation the patient should not assume the erect position, or put his foot to the ground at all. To military surgeons this simple operation is of the utmost value, and enables many men to perform duties they could not do before.—*London Med. Rec.*

Binoxide of Manganese in Amenorrhœa.—The effects of manganese in stimulating the menstrual flow, when its suspension is not due to pregnancy, have been fairly established by trials extending over nearly eighteen months. In the articles contributed to the medical journals on the subject, at the beginning of last year, the permanganate and the binoxide were both mentioned as possessing emmenagogue properties, but experiments have so far been made almost exclusively with the permanganate. In consequence, however, of certain disadvantages which are apt to attend the administration of this salt, unless several conditions are complied with, aided, perhaps, by theoretical notions as to the transformation which so unstable a body may undergo immediately after being swallowed, the binoxide, which is equally potent and less irritating, has latterly come into favor. Manganic dioxide, it is true, has been described as possessing no therapeutical value; but it is conceivable that if its effects are limited, even approximately, to the menstrual function, they may have escaped the attention of observers, especially if, as is not improbable, their investigations were confined to men or animals.—*Brit. Med. Jour.*

Biliousness.—What is commonly known as an acute bilious attack is more properly an acute indigestion.

The treatment of biliousness is prophylactic, alimentary, and medicinal. Prophylaxis is concerned with avoidance of all the known causes, whether of a toxic, malarial, or alimentary character. A plain diet of bread, milk, oatmeal, vegetables, and fruit, with lean meat or fresh fish in moderation, and abstinence from alcsholic stimulants, seem to be the ideal fare for the biliously disposed.

Exercise in the open air is of recognized utility in promoting oxidation, and elimination, enhancing the digestive and assimilative processes, and lightening the burdens of the liver. Moreover, exercise (whether by rowing, horseback riding, gardening, walking) hinders absorption of bile by the hepatic venous radicals, and promotes the passage of that fluid into the duodenum.

The victim of an acute bilious attack will generally get righted in a few days by, first, abstinence from all food, then a diet of porridge and milk, or skimmed milk alone, and a very gradual return to solid food, which for several days should be restricted to toast, a little lean meat or broiled fish, with some succulent vegetables or ripe fruit. As for medicines, saline aperients, such as sulphate of soda, Epsom or Rochelle salts in full doses in the morning, or the now fashionable tumberful of Hunyadi Janós will generally suffice to clear the *primæ viæ;* the latter has especially a reputation for evacuating bile. The striking relief obtained by free bilious evacuation has often been remarked, and the veteran transgressor resorts to his blue pill or podophyllin with every recurrence of his malady. Of late euonymin has come much into use as a cholagogue.

Harley recommends to persons who seem to have a more than usual tendency to biliousness traceable to sluggish biliary secretion, and where there seems also to be defective nerve action, small doses of nux vomica or strychnia after their meals. This may be combined with belladonna and aloes as in the aloin, strychnia, and belladonna pill. The bilious person is generally constipated, hence such a pill has a special utility. Fothergill's pill of ipecac, capsicum, and pil. aloes et myrhh., has done good service in such cases. Nitro-muriatic acid and taraxacum have a reputation which is probably not altogether built on imaginary results. But bilious dyspeptics, while they should be attentive to the functions of eliminations (and doubtless the ancient predilection for purgatives has been justified by modern scientific research which finds in intestinal septicæmias and alkaloids of putrefaction many of the evils formerly attributed to peccant humors and atrabiliary disorders), should aim especially to be good hygienists and learn to live right; but this is counsel which everybody gives and nobody takes.—*Boston Med. and Surg. Jour.*

Cold Applications to the Præcordia in Fever.—Dr. Grigorovih has studied the effects produced by applying cold over the region of the heart in typhoid fever. His observations were made on uncomplicated cases of the disease. Respiration, at first, became somewhat quickened,

and was rendered irregular by reflex action; subsequently it became slower. At the end of the application of the ice, and the next morning, it was deeper and more regular, but somewhat slower than before the ice was applied.

The general conclusions regarding the effect of applying cold to the region of the heart are as follows (*The Therapeutic Gazette*):

1. The cold undoubtedly reaches the heart itself, and thus produces an effect upon its action,

2. This effect is particularly noticeable when the cardiac beats are increased in frequency in consequence of a high temperature quickly attained, and where a certain degree of sensitiveness to a high temperature exists.

3. The effect of cold is not marked at the end of a prolonged attack of fever, pathological changes having by that time probably become established in the cardiac muscle.

4. The local application of cold is only capable of protecting the heart-muscle from the effects of a high temperature when it is applied assiduously from the commencement of the disease.

5. Under its influence the action of the heart improves, the number of beats diminishes, while their force and amplitude increase.

6. Cold applied to the region of the heart diminishes the gravity of the typhoid condition and favorably influences the respiration.

7. With regard to the effect of cold applied to the region of the heart on the course of the general temperature, the author cannot at present express a decided opinion, as he did not investigate the question; but in the results which he obtained indications may be found of the possibility of its causing some diminution of the temperature.—*Med. Record.*

Treatment of Blenorrhagic Cystitis.—Desnos has arrived at the following conclusions after trying different modes of treatment:

1. Blenorrhagic cystitis attacks the neck of the bladder; it is always connected with an inflammation of the deep portion of the urethra, but such urethritis alone cannot give rise to all the symptoms of cystitis.

2. The frequent micturition which occurs in the beginning of blenorrhœa is of too short duration to be mistaken for a positive symptom of cystitis, especially in the absence of other symptoms.

3. In chronic cases the differential diagnosis between blenorrhagic and tuberculous cystitis is generally impossible when the former follows an old blenorrhœa.

4. A number of cases known as cystalgia, or neuralgia of the neck of the bladder, are simply partly cured cases of blenorrhagic cystitis; a painful sensation commonly persists in such cases.

5. The treatment of acute cystitis by emollients is generally fruitless; the injection of solution of nitrate of silver (one in fifty to one in ten) produces a sharp reaction at first, but rapid improvement follows.

6. In chronic cases irrigation of the bladder is of little benefit and can excite fresh inflammation; general treatment is useful, but local treatment applied to the neck of the bladder is indispensable.

7. Bichloride of mercury solution, one in two hundred and fifty to one in five hundred, gives sharp and prolonged pain, and its beneficial effects are less prompt than those of nitrate of silver.

8. Iodoform in oil, or in suspension in glycerine is not painful; its effects, although good, are slow and uncertain.

9. Hydrochlorate of cocaine relieves pain in the bladder for a very short time; applied to the neck of the bladder just before the introduction of a caustic, it lessens greatly the painful effects of cauterization.

10. Nitrate of silver, in solutions of one-fiftieth to one-tenth, in injections of from ten drops to twenty-five or thirty, the author considers the most efficient, safe, and rapid means of treatment.—*Bulletin Général de Thérapeutique.*

Pepsin in Pharyngeal Catarrh.—Dr. J. Fisher, in the *Berl. Kl. Woch.*, 49-86, reports a case of pharyngeal catarrh, in which the various local and internal remedies were tried in vain, until finally, the patient complaining of some transient gastric disturbance, caused by too luxurious a meal, the doctor advised him to take five grains of Jensen's pepsin, which by the way is also recognized in Germany as the best pepsin in the market, immediately after each meal. The patient, who from the frequent medication had become averse to medicine, took the pepsin pure, half a grain of aromatic powder being added to five grains of Jensen's pepsin simply to preserve the latter in its dry state. The effect was remarkable. Not only the stomach improved, but after three days' use the pharyngeal catarrh also showed decided amelioration. Dr. F. then administered the pepsin in still larger doses, ten grains each, and two weeks later the catarrh had disappeared. The same remedy was afterwards tried in four more cases and with the same result, but other pepsin preparations failed.

There is one symptom, that seems always to yield readily to Jensen's pepsin, viz., the peculiar dryness, of which patients suffering from chronic pharyngeal catarrh are so apt to complain. The remedy ought to be taken in its pure state, only a moderate dose of aromatic powder being added to keep it dry, and it should be allowed slowly to dissolve in the mouth.

There is a complaint intimately connected with the catarrh in question, viz., circular ulceration of the posterior nares. Patients suffering from this trouble usually have to hawk a great deal every

morning, sometimes also in daytime, to their own disgust and that of others, until finally they expectorate a round piece of hard muco-pus, with the scab from the ulcer. The hawking is often so great that it leads to vomiting, and the symptom itself is a very annoying one. In a similar accidental manner as Dr. F., Dr. Hugo Engel discovered that Jensen's pepsin, if regularly used in divided doses (10 to 15 grains 3 to 4 times daily), especially if combined with muriate of ammonia (20 grains 3 to 4 times per diem), and with powdered extract of liquorice (same dose as the muriate), to improve the taste, is almost a specific in the complaint spoken of. Only one must be careful to obtain the genuine Jensen's pepsin, there being many similar but worthless preparations in the market, and they are substituted but too often for the genuine article on account of their great cheapness. The tablets of Jensen's pepsin are well adapted for the purpose indicated, and may be taken separately from the sal ammoniac. In that case the aromatic powder may be omitted.

Substitution of Drugs.—It is a well-known fact that there are druggists in every large city who are not to be trusted with the filling of a prescription that calls for any expensive drug. They come and go, so that at last physicians are compelled to designate certain of the drug fraternity as trustworthy, and insist upon their patients going to these alone for their medical supplies. If they fail to do this, their work is thrown away and their reputations go with the failure of their remedies in critical cases.

A few cases from actual observation and experience will illustrate this better than a volume of argument.

1. Thirty grains of quinine, in three doses, to be taken at hourly intervals, were prescribed for a young man suffering from ordinary intermittent fever. The doses were taken as directed, but no signs of cinchonism were induced, and the disease progressed without change. The same doses, in "Warner's sugar-coated pills" were ordered, with the effect of inducing well-marked cinchonism with cure of the disease.

2. In a case of profuse menorrhagia, one ounce of fluid extract of ergot was ordered, with directions to take one fluid drachm every hour until the hemorrhage ceased. The entire amount was taken without result. An ounce of "Squibb's fluid extract of ergot" was ordered—same directions, and the flooding ceased after the second dose.

3. Four ounces of a mixture of bromide of potassium and chloral, each an ounce, with tincture of hyoscyamus and fluid extract of cannabis indica, in appropriate doses, were ordered, with directions to take one teaspoonful every hour until sleep should be induced An ugly, muddy mixture was received, which produced nausea and headache, but no sleep.

A similar prescription instead of the above extemporaneous officinal combination, was ordered, only "Battle's BROMIDIA" was designated, which induced refreshing sleep after a few doses of from twenty to thirty drops had been taken.—William B. Hazard, Prof. of Medicine, Coll. Phys. and Surgs., St. Louis, in *Med. Brief.*

Dont's for a Sick-Room.—Don't appear anxious, however great your anxiety. Don't let stale flowers remain in a sick chamber. Don't jar the bed by leaning or sitting upon it. This is unpleasant to one ill and nervous. Don't have the temperature of a sick-room much over sixty degrees; seventy degrees are allowable, but not advisable. Don't neglect during the day to attend to necessaries for the night, that the rest of the patient and family may not be disturbed. Don't ask a convalescent if he would like this or that to eat or drink, but prepare the delicacies and present them in a tempting way. Don't throw coal upon the fire; place it in brown paper bags and lay them upon the fire, thus avoiding the noise, which is shocking to the sick and sensitive. Don't be unmindful of yourself if you are in the responsible position of nurse. To do faithful work you must have proper food and stated hours of rest. Don't permit currents of air to blow upon the patient. An open fire-place is an excellent means of ventilation. The current may be tested by burning a piece of paper in front. Don't give the patient a *full* glass of water to drink from, unless he is allowed all he desires. If he can drain the glass he will be satisfied; so regulate the quantity before handing it to him.—*American Druggist.*

An Autopsy Extraordinary.—The following report of an autopsy is by a physician, who is said to be doing a lucrative practice in Delta, O. It goes to show that success in gaining the confidence of the community is not necessarily conditioned on such an appreciation of anatomy, physiology, and pathology as the modern school holds to be correct. "E. C. C——, opened on September 25, 1885, for post-mortem examination. We find that sickness first started in the kidney No. 18, and from there to the hip bone, No. 15, from there to the spine No. 1, from that to the blood, cancer or abscess. blue cancer, etc. From large artery in the 6th rib affected and to the muscles of the hip, where started the ulcer on the left side, and thense to the urine, from thense to large intestine which was affected fifteen yards, and from there to a milky deposit in the bladder, and thense back again to the kidneys, from thense to the hair veins, from thense to the back, and thense to the stomach. and thense to the bladder, and thense to a fever through all the system, No. 18, the liver's weight

was 4 lbs., which was badly affected and mortified; from thense to the largest nerve which was connected with the brain which affected them. Weight of the kidney, one half pound. The doctor's statement before opening the corpse was consumption of the liver and kidney."—*The Medical Age.*

Guy's Hospital in Need.—Perhaps the worst sign of the agricultural depression in England yet recorded, is that Guy's Hospital is asking the public for subscriptions. "Guy's" has hitherto been a very proud hospital, and has kept house magnificently, in the interest of the suffering poor, on an income of over £41,000 a year, derived from estates in land. But the annual yield of these estates has been diminishing steadily since 1879, until, at the present time of asking, it has come so low as £26,000, with every prospect of further decrease. The total of 650 beds of the old prosperous times has been reduced to 500, and then to 400, and it is believed that the worst has yet to come. At one time, when money meant money, and land was land, Guy's lived in great charitable state on its fortune of £220,000 from Mr. Alderman Guy, and its £180,000 added by Mr. William Hunt, a century later, to make the round £400,000, and never asked the public for a penny.—*Med. Record.*

Internal and Local Medication in the Treatment of Herpes Zoster.—During the past year and a half there have come to my notice, at various stages of the disease, a number of cases of herpes zoster, and as the following method of treatment has given very gratifying results, it occurred to me that it might be of interest to your readers. The treatment consists briefly in the administration of a blue pill (two or three grains) twice or three times during the day, and the local application of zinc ointment carbolized (two per cent.), the parts being also protected from irritation of the clothes and other external influences. In every case so treated the pain ceased and the eruption was controlled in the course of a day or two, or after the purgative effects of the drugs had disappeared, the vesicles drying up, leaving brownish crusts, the latter dropping off in the course of a few days.—*Med. News.*

Accouchement During Hypnotic Sleep.—In the *Wiener Med. Wochenschrift* a case is mentioned of a woman whom Dr. C. Braun succeeded in rendering unconscious during labor by throwing her into a condition of hypnotic sleep; the uterine contractions were particularly painful. They were equally violent during the period of unconsciousness, but the intervals were somewhat longer; dilation of the passages took place in the most satisfactory manner, and delivery was speedily accomplished. The placenta was expelled into the vagina, and was easily withdrawn with the hand. On awakening, the patient did not complain of pain, and afterwards slept naturally for several hours. One of the most interesting features of the case was that the uterine contractions induced contraction of the abdominal muscles without awakening the patient. Hæmorrhage was very slight.—*British Medical Journal.*

The Dietary in Catarrh of the Stomach.—I. Milk, cold or warm; bouillon; beef tea prepared cold. To one pound of beef cut up in pieces the size of dice, add one pint of distilled water and 10 drops of dilute muriatic acid. Let stand in refrigerator 24 hours; strain and season to taste, and if desired, warm, but not enough to make cloudy.

Peptonized milk; zwiebach not sweetened, crackers, rusk, toast; natural Seltzer and Vichy waters, carbonated distilled water.

II.—Soft boiled or raw eggs; rice or sago boiled soft in milk; clear soups; purée of potato; vermicelli or "noodle" soups; raw oysters.

Boiled, roasted, stewed, or broiled calves' brains, sweetbreads, pigeons, chichen, calves' feet (?)

No vegetables, except those mentioned to be allowed with soups.

No "wheaten grits," hominy, barley, oatmeal.

III.—"Minced" or finely cut boiled ham, and rare beefsteak.

Coffee and tea. Articles under I. and II. as advised.

IV. Rare roasted beef and veal, especially cold; roasted chicken, and pigeons without sauces, especially cold; venison; partridges, woodcock and snipe, not too fresh; boiled fish; white bread (stale); macaroni; baked apples; fruit jellies; a very small amount of butter, otherwise no fats at any time; only dry wine; no beer; no ale or porter. Rye whiskey or brandy diluted with the waters mentioned may be used with lunch and dinner when pronounced necessary.

Treatment of Laryngo-Pharyngitis.—The following are Coupard's formulæ:

By atomization five minutes night and morning:

Acid, carbolic,	grs. xv.
Potass. bromid.,	ʒ jss.
Aquæ,	O j.

And as a gargle:

Acid, carbolic, Zinc, chlorid.,	āā grs. xv.
Syrup, morph. hydrochl.,	℥ iv.
Inf. cocæ fol.,	℥ viss.

—*Rev. de Thérap.*

THE CANADA LANCET.

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☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet, Toronto."*

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TREATMENT OF PLACENTA PRÆVIA.

Fortunately this abnormal position of the placenta is of rare occurrence. Statistics vary greatly as to its relative proportion to all other labors, but judging from the records published, one case in about five hundred is a fair approximation. It is evident, therefore, that no one in private practice can possibly acquire sufficient experience, to enable him to form an opinion of any great value regarding the various methods of treatment advised or adopted. It is only from hospitals and maternities in populous centres, that we can derive sufficient information to guide us in private cases. Yet infrequent as placenta prævia is, it is very important that we should be individually prepared to meet it at any time, and have clear conceptions regarding its management.

Many learned disquisitions, and innumerable discussions have been published regarding the source of the hemorrhage. The most plausible view in our opinion, is that of Schrœder, namely: That the uterine contractions impel the blood from the place whence the placenta has been separated, and that from the separated portion, blood circulating through the chorion and villi, becomes lost. Unguarded examination may also lacerate the placental tissue, and so cause fœtal hemorrhage. But to close the source and prevent the flow is the all-important consideration. Successful treatment should be our chief object, and is the one great desideratum

Formerly the accoucheur's choice was limited, in the early stage before the os was much dilated, to plugging the vagina; forcible dilatation, version, and immediate extraction, manually, or by instruments if necessary, or separation of the entire placenta; all of which have been advocated and endorsed by eminent authorities, and still obtain among many of the prominent obstetricians of the present day.

Recently, some considerable variations to these established methods have been admitted and practised, with apparently better results, which briefly are as follows: Rupture of the membranes, if the presentation be normal. This acts, by allowing the placenta to retract from within the lower segment, and causing the presenting portion of the fœtus to act as a plug. It is claimed that this alone has proved sufficient in a large number of cases. Where necessary and possible, perform the intero-external version; bring down a leg to act as a plug, and wait for expulsion by the natural forces, or aid them very cautiously after the os has been sufficiently dilated. The advantages claimed are: That it abolishes the use of the tampon, and lessens the risk of sepsis; it allows early operation, before much blood has been lost; it arrests hemorrhage; it enables the patient to rally, gives the os time to dilate, and lessens the risk of post partem hemorrhage from laceration of the cervix or vaginal soft parts. In some cases, when everything favors extraction—such as a well-dilated os, and head low down—forceps are sometimes used, and occasionally it is found necessory to perforate and extract rapidly.

It is obvious that no one rule, or set of rules, can meet all cases; consequently the accoucheur should be thoroughly familiar with all, and in a position to select and adopt the method of delivery best adapted to his particular case. Another important question arises, when moderate hemorrhage occurs prior to full term, and placenta prævia is discovered; whether we should immediately bring on labor, or try to allay the hemorrhage and prevent its return as far as possible; pursuing the expectant plan, with the object of arriving at full term, or the nearest possible approach thereto before delivery.

Many advocate immediate delivery, considering the risk to the mother too great to permit delay; while others, equally prominent and of no less

experience, believe the expectant plan to be the proper one, not only in the interest of the fœtus, but of the mother as well, when the premature hemorrhage can be controlled.

This question came up at the Ontario Medical Association meeting last June. Of those who discussed the point then, the majority thought the expectant plan under favorable circumstances the better one, although some condemned it as incurring too much risk under any circumstances. Consequently the obstetrician is at liberty to decide upon which course he shall pursue, as his judgment may dictate, guided by the circumstances attendant on his particular case.

If we might be permitted to express an opinion, from our comparatively limited experience, we would advise the adoption of the expectant plan, when the patient is convenient to a physician, the hemorrhage controllable, and all other circum stances are favorable.

NEW TREATMENT OF PHTHISIS.

Dr. Bergeon's treatment of phthisis by injection of sulphuretted hydrogen into the rectum, has been carefully investigated by Dr. Bennett, and the result, with observations communicated to the *British Medical Journal.* Dr. Bergeon, of Lyons, has been experimenting for years, on the action of certain gases when introduced into the large intestine. He found that carbonic acid gas was absorbed by the intestines, and exhaled in a few moments by the mouth, without any toxic effects whatever. While however the carbonic acid gas proved innocuous, he found it was entirely without therapeutic value as to the cure of the pulmonary troubles. After having tried various medicinal agents, he settled upon sulphuretted hydrogen as a powerful microbicide. Knowing then, that he had a medium in carbonic acid gas, he medicated it by passing it through a bottle containing water charged with sulphuretted hydrogen, and found this mixture well borne by the intestines. Within two or three minutes after the injection, the patient's breath is tainted with sulphuretted hydrogen, being absorbed by the veins of the intestines and exhaled by the mouth through the lungs. He injects four litres (quarts), twice a day, about twenty minutes being required for each injection. During this time the intestines distend, but without any pain or discomfort, unless atmospheric air is allowed to enter along with the medicated gas. In that case tormina come on, the air acting as an irritant. The gas is entirely absorbed and exhaled in about half an hour after ceasing the injection. Dr. Bergeon finds that chemically prepared sulphuretted hydrogen produces irritation and colic, and uses the natural gas from the water of Eaux Bonnes in the Pyrenees. The medication must be made with most scrupulous care as to details, non-success always following careless treatment or bad quality of gas. The carbonic acid gas must be generated fresh on each occasion, and at first the enemata must be given by the medical attendant, care being taken to see what quantity each patient can bear.

Dr. Bergeon claims marvellous results from this treatment. In 200 cases of chronic pulmonary and throat diseases, treated at Lyons, where the climate is against such diseases, he says, "the results have been successful to a degree that surprised and astonished him." He says that, "in early phthisis, even in acute general phthisis, a form of disease nearly always rapidly fatal, in two or three weeks there is generally an arrest, and in a few months a cure." When the disease is so advanced as to be incurable, an amelioration is always obtained.

Dr. Bennett seems forced to admit, while having the usual amount of skepticism regarding new remedies, that there is much in what Dr. Bergeon has brought forward, and cannot deny the facts as placed before him by Dr. Bergeon, and by other physicians at Geneva. He mentions the case of an Englishman, known to himself, who has been apparently cured of severe idiopathic asthma, by a short course of the sulphur gas treatment.

This is certainly a new departure in therapeutics, and though the method has its drawbacks, if it prove curative of phthisis and asthma, it must soon be widely adopted, though at present such adoption cannot be general. The cost of the apparatus necessary, is not great, being about fourteen dollars.

BROOKLYN has been suffering from an outbreak of small box. Efforts are being made to check its spread. A large corps of special vaccinators being at work.

LOCAL HYPERIDROSIS.

Pathologically, excessive sweating may occur as a symptom of some acute disease as ague, rheumatism or pneumonia, or as a result of anæmia of the skin as in phthisis; or idiopathically, and then may be regarded as an anomaly of function. Rindfleisch teaches that the only uncomplicated change which occurs in the sweat glands is simple hypertrophy, but whether such hypertrophy occurs in hyperidrosis is open to question. Sangster gives the pathology of the disease as a "functional disturbance of the sweat glands increasing the quantity of sweat secreted, but not altering its quality." This seems in accord with the teaching of modern physiology, that the secretory activity of the sweat glands, as of other secretory organs is under the influence of two sets of nervous fibres, the one ganglionic, and regulating the vascular supply, the other belonging to the spinal system, and having to do with the activity of the epithelial elements of the gland.

Local hyperidrosis occurs most frequently in the perineum, the axillæ, the palms and soles, though other forms, such as hyperidrosis of one side of the face or head are not uncommon, occurring under the influence of some local neurotic disturbance. In the axillæ it is frequently a source of great annoyance, and especially to young ladies, who are greatly worried by the injury done to their clothing, and more, by the knowledge that the decomposition of the secretion produces a rank odor, often extremely disagreeable to persons in their immediate neighborhood. That form which most frequently calls for treatment is sweating of the soles of the feet. This is usually accompanied by a horrible fetor, and it occurs more frequently in young adult females, frequently interfering with either the occupation or with the social duties of the patient.

In excessive sweating of the axillæ or perineum astringents are useful, especially alum and tannin; thus, a lotion of one drachm of tannin to six ounces of spirits of wine frequently applied will be found useful, as it will also in mild cases of hyperidrosis of the feet. The local application of belladonna is especially useful in sweating palms. Hilton Fagge mentions a case of a young lady cured by this means after other treatment had failed. Care will however be necessary to avoid toxic effects. The treatment of the affection in the feet is not so simple. It is stated that the decomposition and accompanying fetor is due to a bacterium which has been cultivated, and has produced the same specific (?) odor outside the human body. This bacterium has been described by Dr. Thin. The question naturally presents itself, whether this micro-organism, may not stand in some causative relation to the disease, rather than being simply causative of the odor due to the decompositon of the secreted sweat. At any rate, whether to cure the disease is to lessen one of its most unpleasant symptoms, some anti-parisitic application is indicated. Thus we have seen a case of well marked bromidrosis with sodden, white soles, tending to desquamation, with red, tender skin left underneath, and most offensive odor noticeable before removal of the shoes and stockings, which succumbed speedily and entirely to the application of equal parts of citrine and simple ointments, after other treatment fairly tried had failed. Hebra's plan is said never to fail if properly carried out. It was to apply a mixture of equal parts of emp. plumbi and linseed oil to the foot, previously well washed and dried. Bandages to be applied, clean stockings and new boots to be worn. The toes to be separated by pledgets of lint smeared with the ointment. This dressing remains twelve hours, the foot is then to be wiped (not washed) and dusted with starch. The dressing is again applied and this is repeated twice a day for ten or twelve days, after which desquamation takes place and the patient is cured. Liveing says this is the only way he knows of curing this troublesome malady.

Another remedy which finds favor is boracic acid lotion, at the same time dusting the finely powdered acid into the socks, or soaking the socks in a saturated solution of the acid.

Motion of Condolence.—At the late meeting of the Huron Medical Association, the following resolution was unanimously adopted, and a copy sent to the bereaved family. "Moved by Dr. Smith, of Seaforth, seconded by Dr. Graham, of Brussels, and *Resolved*,—That as members of the Huron Medical Association, we desire to avail ourselves of this opportunity of extending to Dr. William Sloan, of Blyth, an expression of our sympathy in the irreparable loss he has been called

upon to sustain in the untimely decease of his son, Dr. A. W. Sloan, of Listowel. The deceased, though naturally of a retiring disposition, had a most genial manner, and was thoroughly devoted to the interests of the profession of which he was a bright and promising ornament. This Association, while extending sympathy and condolence to the family of the deceased, desires to place on record the high estimate that had been formed of the gentlemanly character and professional attainments of him whose memory will be long and pleasantly cherished."

SNUFF FOR ACUTE AND CHRONIC NASAL CATARRH.—The following is given *(Therap. Gaz.)* as an excellent snuff for acute or chronic catarrh, and acute coryza, especially when accompanied with pain of the nasal nerve. It can be used as a snuff by the patient himself or in a powder-blower.

℞ Cocaine hydrochl.. gr. x ;
Ol. eucalypis, gr. iii ;
Iodoform, ʒi ;
Sacch. last., ad ʒi. M.
Ft. tritutrate (snuff.)

Sig.—Use every two or three hours. When relieved use two or three times a day.

"Another formula which I have found of service is a modification of that recommended by Beverly Robinson, which is as follows :

℞ Pulv. fol. belladonnæ, gr. xx ;
Cocaine muriate, gr. v ;
Ol. rosæ, gtt. i ;
Pulv. gum acaciæ, ad ʒss. M.
Ft. triturate (snuff.)

Sig.—Use with the powder-blower for anterior and posterior nares."

SANTAL OIL IN BLENORRHAGIA. — Dr. Litzel *(Allg. Med. Zeit.)* gives the following as the result of his obserqation in the efficacy of the above remedy in blenorrhagia :—1. Given in an early stage, the secretion diminished rapidly, and the pain on micturition ceased. This result happened in thirty-seven out of forty-two cases. 2. If, after ten or twelve days, the oil be discontinued, the old symptoms reappear. 3. The best results were obtained when the oil was commenced in the third or fourth week of the gonorrhœa, together with the use of weak astringent injections. 4. Cystitis and gonorrhœal prostatitis were always greatly benefited by the oil. 5. Cases of gleet did best under local treatment.

HISTORY OF THE MEDICAL PROFESSION. — Dr. Canniff, author of "The Settlement of Upper Canada" is engaged in collecting information relative to the beginning, rise and development of the medical profession in Upper Canada, with the view of publishing a history of the profession of the Province of Ontario. Any facts respecting the first medical men in the different sections of the Province will be thankfully received ; and he respectfully asks the assistance of the profession. The items desired relate to the name, nationality, time of arrival in the Province, place of medical education, professional qualifications, how and when licensed, place of practice, incidents in practice and experience, and any official position held.

IMMEDIATE CURE OF WHOOPING COUGH.—Dr. Mohn reports seven cases of whooping cough cured by the simple process of fumigating the patient's room, bedding, etc., with sulphurous acid. The following *(Med. Rec.)* is the plan :—"In the morning the patient is clothed only in linen and taken out of the bedroom. In the bedroom are left the bedding, linen, clothes, playthings, and everything that cannot be washed. Then sulphur is burned in the proportion of twenty-five grammes to every cubic metre of space in the apartment. After five hours the room is aired. In the evening the patient sleeps in a perfectly pure atmosphere, and in the morning he is cured."

THE "BACTERIUM TERMO" SPRAY IN PHTHISIS. —Mr. A. Primrose Wells *(Brit. Med. Jour.)* draws the following conclusions regarding the use of the "bacterium termo spray" in pthisis :—The forced deep inspirations necessary are very beneficial in some conditions of the chest. When diarrhœa is present it checks it, improving the appetite as a rule. It has a tendency to diminish expectoration, and an influence for good in cases not too far gone, but in rapid forms of the disease, and where much excavation exists, it is useless.

ORCHITIS AND EPIDIDYMITIS. — Dr. Lowndes *(Lancet)* treats the above according to the method of Fourneaux Jordan, which consists in painting the testicle with a solution of nitrate of silver, two drachms to the ounce ; at the same time strict rest

s enforced. The pain is soon subdued and the testicle returns to its normal size in a few days. Sometimes a second painting may be necessary. Dr. Lowndes has treated 269 cases in this manner.

MEDICAL ETIQUETTE.—It may be interesting to some of our readers to know that it is considered (*Brit. Med. Jour.*) obligatory, for the recently arrived practitioner to call at as early a date as possible upon "every duly qualified, ligitimate medical practitioner resident within a reasonable distance of his own selected place of abode, and courteously announce his intention to practice in the locality."

DISINFECTANT MIXTURE FOR THE SICK ROOM.—*L'Union Médicale* gives the following:

Camphor	20 parts;
Calcium hypochlorite	50 "
Alcohol	50 "
Water	50 "
Oil of eucalyptus	1 part;
Oil of cloves	1 "

Mix in a large vessel kept cold. A few drops, on a napkin, are enough to disinfect a room.

SYPHILITIC CONDYLOMATA.—Dr. Parsons (*Med. Rec.*) says he has never known the following to fail in speedily curing syphilitic growths around the anus and on the scrotum:

R.	Morph. sulph	gr. ij.
	Pulv. camphor	gr. xx.
	Bismuthi subnitrat.,	
	Hydrarg. chlor. mitis	āā ʒ iss.
	Cosmolin	℥ j.

Sig.—Wash with soap and water, and then rub the ointment in thoroughly twice a day.

PILLS FOR AMENORRHŒA.—De Mussy recommends (*Nouv. Remed.*) the following formulæ:

Salicin	1.00 (gr. xv);
Pulv. rhei	0.50 (gr. viiss);
Confect. rosæ	q. s.

M. Ft. pil. No. x. Sig: One to three daily.

GASTRALGIA—

R.	Tinct. stramonii	ʒ ss.
	Tinct. hydrastis	ʒ iv.
	Aqua laurorcerasi	℥ ijss.

M. Sig.—One teaspoonful in water every four hours.

COLLEGE PHYSICIANS AND SURGEONS, ONT.—The corner-stone of the new Medical Council Hall of the College of Physicians and Surgeons of Ontario was laid on Tuesday, the 26th ult. The ceremony was an informal one, the Building Committee and a few friends being the only persons present. The stone was laid by the President of the Council, Dr. H. H. Wright, in the name of Galen, Hippocrates, Harvey and John Hunter.

THE RESULT OF PASTEUR'S WORK.—Pasteur reported to the Academy de Médicine, Nov. 2nd, that he had inoculated 2490 persons, of whom 1750 were from France and Algiers. Of this 1750 there were 10 deaths or one in 175. One death only of an inoculated person occurred in Paris last year, and three in all, though the annual average is twelve. He reports that when the face is bitten it is necessary to inoculate more rapidly and with more powerful virus.

DRUMINE.—The London *Lancet* gives some particulars as to the new anæsthetic, *drumine*, the alkaloid prepared from the juice of Euphorbia Drummondii of South Australia. It differs from cocaine in paralyzing only the sensory nerves. The pupil is not affected by it, nor does it produce any constitutional symptoms in small doses. It has been successfully used as a subcutaneous injection in sciatica.

GYNECOLOGY IN SOUTH AFRICA.—The ladies of South Africa are so delicate that vaginal examinations (*South African Med. Jour.*) will rarely be submitted to. Even the chest is sacred ground, the editor of the above journal having been refused permission to use his stethoscope thereon.

OINTMENT FOR STRUMOUS GLANDS.—Dr. Kaemmerer says the following will if used early, prevent suppuration, and gradually reduce the enlargement of strumous and syphilitic affections, and bring about a normal action of the gland involved.

℞	Ext. belladonnæ	ʒi
	Ung. hydrarg.	ʒiv M.

BRITISH LICENTIATES.—The following gentlemen have recently obtained the license to practice medicine and midwifery, King and Queen's College of Physicians Dublin. T. D. Ambrose, Montreal; Dr. Hastings, Victoria, Toronto; Dr. Midgley, Trin., St. Thomas, Dr. Pattullo, Victoria, Toronto.

LEPROSY AND SYPHILIS.—The answers received from medical men whose practice has brought them into contact with leprosy, by the Royal College of Physicians as to the relationship existing between leprosy and syphisis, are not such as will settle the question. Twelve regard the two diseases as intimately connected, while twenty-one think there is no relationship between them. The question as to the contagiousness of leprosy, is also left open, thirteen being certain it is contagious, and thirty-four being equally certain that it is not at all contagious.

MORE COUGHING THAN IS NECESSARY.—Dr. Rumbold *(Maryland Med. Jour.)* says that many patients cough more often than they need do, and that the number of coughs may be greatly lessened by asking that a record shall be kept, as by marking on a card, of the number of coughs in the 24 hours. He has known patients to reduce the number of efforts 75 per cent., and always with advantage to the cough and the patient.

PERSISTENT DIARRHŒA.—The following formula is a favorite one *(L'Union Med.)* with Trosseau for diarrhœa, which has resisted other treatment :—

℞.—Powdered ipecac. . . . . gr. viij.
Extract of opium,
Calomel, ... āā gr. iss.

To make twenty pills.

The dose, one to three pills daily, is continued for a week or longer.

ANTISEPTIC PAPER DRESSING—Dr. Perez recommends, says the *Lancet*, a simplified antiseptic dressing, made of bibulous paper, soaked in a solution of carbolic acid, boracic acid, or corrosive sublimate. This is placed over the wound in about eight layers, covered with Mackintosh, and the whole secured by a rubber bandage. The writer claims for this dressing the advantages of cheapness and portability, and thinks it would be useful in field and small hospitals.

STERILITY FROM TEA-DRINKING.— Dr. Davies *(Therap. Gaz.)* says that tea-drinking undoubtedly acts in the direction of producing sterility in females. He calls attention to the fact that the Druidic College, of the 12th century, considered tannin the most potent of all the products of nature in producing this condition.

SUPRA-PUBIC LITHOTOMY.—Mr. Thomas Smith reports a case of supra-pubic lithotomy, in which the stone which had an oxalate nucleus, coated with phosphate, weighed 24½ ounces, and measured 13 inches in its largest, and 9½ inches in its smallest circumference. The patient, a soldier, æt. 43, made a good recovery.

TEMPERATURE IN CHILDREN.—Ringer states that in healthy children the temperature falls at midnight to about 97 ° F, or even 96 °. Some robust adults have a similar course of temperature during the 24 hours, to children, while others have a smaller cycle, the highest and lowest temperature being less.

SEVERED DIGITS.—We have noticed several reports of the perfect reunion of fingers and toes after complete severance by sharp cutting instruments. The experiment should be tried in suitable cases, though it must of course more often fail than succeed.

NÆVUS.—Dr. Beatty, *(Brit. Med. Jour.)* reports eight case of nævus cured, painlessly and entirely, in from three to five weeks, by painting the affected spot twice a day with liquor arsenicalis, until ulceration occurred.

PHOSPHATES IN PHTHISIS.—Dujardin-Beaumetz recommends the following to improve the nutrition in phithisis :—℞. Sodii phosphat., ʒjss. ; potassa phosphat., ʒj. ; syr. auranti cort., ʒij. ; vini (claret), fl. ʒvij. M. A wineglassful taken after each meal.

PHTHENIASIS PUBIS.—One thorough application of ether is said *(N. Y. Med. Jour.)* to be successful in the treatment of the above disease. It is more advisable than chloroform, being less irritating to the skin.

PATENT MEDICINES IN RUSSIA—The Russian government has prohibited the importation of patent medicines ; the list of articles published containing about 800 items.

The London *Lancet* defines "moderate drinking" as that which is indulged in to the extent that the individual has a clean tongue, a good appetite, a slow pulse, a cool skin, a clear head, a steady hand, good walking power, and light, refreshing sleep and asserts that "odd glasses of beer and spirits

in a forenoon do not come within the range of moderate drinking."

Erlenmeyer calls cocaine the third scourge of humanity; alcohol and morphia being the other two.

In Boston they do not say stomach-ache, but gastric neuralgia; but it "gets there all the same." —*Life.*

Books and Pamphlets.

General Paralysis of the Insane. By Wm. Julius Mickle, M.D., M.R.C.P., London, Medical Supt. Grove Hall Asylum, London, England. London: H. K. Lewis.

This is a second edition of Dr. Mickle's treatise which was published in 1880. All who know Dr. Mickle will feel assured that the time which has elapsed since the appearance of his first edition has not passed unimproved. Dr. Mickle has always been known, both in his native Canada and since he became a settled resident of England, as an indefatigable and unceasing worker in whatever branch of medical science he was engaged. His career as a student in our University was one of signal honour, and the promise of future distinction then given has been most amply realized. The position held by him in England, as Medical Chief of an asylum for the insane, has presented to him superior opportunities for observing the peculiar malady which he has chosen as a subject of his treatise; and, certainly, every reader of his book will feel convinced that, alike in the department of minute and intelligent clinical observance and anatomo-pathological research, he has well cultivated the advantages so opportunely presented to him. His first edition covered 246 pages; it was the first treatise solely devoted, in England, to general paralysis of the insane. The present edition, which has been "wholly re-written," covers no less than 466 pages, and it contains more than double the quantity of matter of the first.

It might well go without saying that the entire literature of the subject has been explored and judiciously laid under contribution by Dr. Mickle, for it is evident he still continues to "distil the midnight lamp," and his youthful bibliophilism has but grown with his growth and strengthened with his strength. Most earnest is our hope that the pace has been equal, for no animal machine can be worked with safety beyond its inherent strength, and the aggregate strength of every machine must be measured by that of its weakest part. The science of alienism cannot spare so valuable a worker, but in order that he may work well and long, he must learn to spare himself. England rejoices in his well-earned fame; Canada is proud of it, and humanity and science are grateful for the toil and devotion by which it has been attained. The book should be in the hands of *every* member of the medical profession. The disease of which it treats is, in all highly-civilized countries, becoming constantly more frequent, and in past years it was the rather unpleasant experience of the writer of these lines, that the diagnosis, at least in the early stage of the affection, was too seldom correctly understood. It is only in this stage that any favorable result from treatment can be expected.

Diseases of the Nerves, Muscles and Skin, being Vol. III. of Dr. Hermann Eichhorst's Handbook of Practical Medicine, and Vol. X. of Wood's Library of Standard Medical Authors, 1886. New York: W. Wood & Co.

Also Vol. 2nd, by the same author, previously received, on "Diseases of the Digestion, Urinary and Sexual Apparatus."

The courage evinced by the enterprising house of Wm. Wood & Co., in issuing so comprehensive a series of volumes (no less than 12), from the pen of a foreign Professor, is deserving of applause, considering the fact that the field is already so densely filled with able, and we had almost hoped, exhaustive works on practical medicine. In truth these treatises now come so closely on each other's heels, as hardly to leave the reader time to bid good bye to one before a successor claims his attention; but in a country so fond of new things as the United States of America, there is always room, and some to spare, for more; and it is pleasant to see the Swiss republican so friendly taken by the hand by his trans-Atlantic brothers. The reader who desires to acquire a knowledge of the latest achievements in the science and practice of medicine, will find in Professor Eichhorst's volumes an abundant supply; and all who are pleased

with well executed pictorial illustrations, will award their admiration to the multitude of plates, no less than 263, which adorn these two volumes.

WORKS OF HIPPOCRATES, translated from the Greek by F. Adams, LL.D., in two volumes. New York: W. Wood & Co.

We welcome the second volume of this most interesting, and may we not add, instructive production? for we venture to believe, and to say, that our ancestors knew more, even of medicine, than their descendants give them credit for. It is now 2247 years since the great physician of *Cos*—we dare not say, *died*—for true greatness and true goodness never die—and as long as medicine continues to be cultivated as a true science and practised as a noble and beneficent art, the name and fame of *Hippocrates* must continue to inspire its votaries. The aged will read his works with that gratification which their veneration of antiquity and their sage experience never fail to evoke; and the young, who are lovers of classic lore, and admirers of brave and deep thinking, will be inspired with an elevating emulation, which, if duly cherished, will raise them above the meretricious devices of modern charlatanism. Surely that was a great country which gave to the world a Homer and a Hippocrates; and great too must have been its people. Great thinkers were they, and great doers also, and much do we owe to them.

OUTLINES OF THE PATHOLOGY AND TREATMENT OF SYPHILIS and Allied Venereal Diseases. By Hermann von Zeissl, M.D. Second Edition. Revised by his son, and translated by Dr. H. Raphael, M.D. Cloth; pp. 402. New York: D. Appleton & Co. 1886. Toronto: Hart & Co.

The author, from the experience afforded by more than 30 years of careful observation and research, has deservedly a high reputation as a syphilographer. His observations have included more than 30,000 cases, treated by him both in private and hospital practice. Much attention is given to the pathology of the diseases dealt with, as the author believes it to be the proper means whereby to understand the diagnosis and treatment of the various venereal affections; but, at the same time, the therapeutics receives sufficient consideration to make the work thoroughly practical. A large number of useful formulæ are introduced, which will prove especially useful to the young practitioner. The translation is exceedingly well done, and we can heartily recommend the book to those wishing a comprehensive view of the latest ideas regarding venereal diseases.

THE PHYSICIANS' HAND-BOOK FOR 1887. By H. & A. D. Elmer, M.D. New York: W. A. Townsend.

This well known hand-book is now in its thirtieth year of publication. While always valuable, it has recently been thoroughly revised, and is now presented to the profession as the most complete ready-reference and diary combined in the market. It contains a fund of useful information in regard to diseases, remedies, doses, poisons and their antidotes, etc., besides a record for daily practice, all within the smallest compass.

SHARPENING HYPODERMIC NEEDLES.—A fruitful cause of abscesses in hypodermic medication is dull and rusty needles. The rust may be avoided by wiping the needles from time to time with rouge or crocus cloth, purchasable from any cutlery or hardware establishment. The finest emery cloth is too coarse for this use. Every physician ought to be able to sharpen his needles himself. The best hone for the purpose is that known as the Hot Springs or Washita razor hone. Thrust the needle with the wire in it, through a bit of soft velvet cork long enough to come within a quarter of an inch of the commencement of the bevel point of the instrument. The cork will serve as a handle for the fingers and at the same time holds the needle stiff and taut. It is also a guide in preserving the proper bevel of the point A few light rubs upon the hone will put a keen point on the dullest needle.—*St. Louis Med. and Surg. Jour.*

Births, Marriages and Deaths.

On the 19th ult. Dr. E. A. Nealon, of Campbellford, aged 30 years.

On the 30th of Dec., A. M. Sloan, M.D., son of Dr. W. Sloan, of Blyth, aged 27 years.

On the 26th of Dec., J. M. Drake, M.D., of Abbotsford, Que., aged 59 years.

*** *The charge for Notices of Births, Deaths and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communications.*

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SCROFULOUS OR TUBERCULOUS GLANDS OF THE NECK *

BY GEO. E. FENWICK, M.D.,

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The lymphatics of the neck are frequently affected by simple inflammation from cold. They sometimes become sympathetically enlarged from some local irritation; but what are known as scrofulous glands are so intimately connected with tubercle, if, indeed, they are not actually tuberculous, that they demand a separate consideration.

The term scrofulous has never appeared to hold any very definite signification. It certainly cannot, *per se*, be regarded as a positive state of diseased action known or indicated by a certain set of signs and symptoms, but is rather a state of the system generally, a peculiar constitutional condition or diathesis, acquired or inherited, which subjects the individual to the invasion of certain well-marked affections. The term scrofulous, as applied to enlarged lymphatic glands, does not indicate the actual condition of change in the gland structure It is true that enlarged and caseating glands are constantly met with in persons suffering from what is termed scrofula or struma, but this state of enlargement and alteration in texture has long been recognized as due to or depending on the presence of tubercle. To discuss the history of tubercle would be foreign to my purpose, and would occupy more time than I have at my disposal. First definitely described by Bayle in the early part of this century, various theories and opinions have from time to time appeared. The discovery by Koch in 1882 or '83 of what he named the "tubercle bacillus," and which he has demonstrated as existing in all tubercle, has completely revolutioned the views tacitly admitted by pathologists as to the actual nature of this change in the tissues. Koch believes the bacillus to be *materies morbi* of tubercle, so that the views held by Virchow that it requires evidence of the presence of military tubercle in connection with cheesy products to constitute true tuberculosis must be greatly modified, and it is now held that all inflammatory changes, whether in a state of cheesy degeneration or not, if the bacillus of tubercle can be therein demonstrated, must be regarded as tuberculous. While I have confined my observations to tuberculous glands, I must state that there are many other structures which are liable to the invasion of the tubercle bacillus, and which are recognized as properly coming under the heading, not of scrofulous degeneration, but of tubercular infection.

In discussing the subject of the liability of the various tissues and organs of the body to the invasion of tubercle, Volkmann holds that the evidence of tuberculosis depends (1) on its well-known structural appearance, (2) on the presence of the tubercle bacillus, and (3) on the positive results given by experimental innoculation. There is scarcely any texture of the body which is exempt from the invasion of tubercle, and it would seem that the lymphatics are specially open to attack, since their very function, as it were, exposes them to infection. Clinical experience points to the liability of the tissues to this invasion of the bacillus. While this great fact is borne out by every-day observation, it is equally true that a peculiar aptitude or condition of the system must exist to favor the occurrence of the disease known as tuberculosis. We may believe that many, if not all, are occasionally exposed to the influence of the materies morbi of Koch, but it would appear that a suitable soil is essentially necessary in which the germ can develop and give rise to the various changes that have been noticed in its wake. To this state of special liability to the invasion of tubercle—to this peculiar diathetic condition the term scrofulous may be applied with some definite signification.

Of all the superficial glands, those of the neck exhibit a special aptitude to the invasion or development of tubercle. The glands of the axillary

*Read before the Can. Med. Asso. at Quebec, Aug., 1886.

and inguinal regions are rarely affected. In the neck, the most favored localities are the submaxillary, the glands at the angle of the jaw, and those situated in the posterior triangle. Usually, when first seen, they are somewhat small, unless, indeed, they have for a time escaped notice, and have been left undisturbed, when they will occasionally attain a considerable size. They are described as having been met with, several inches in diameter, although I must say that very large glands have not, so far, come under my own observation. They are rarely single, more frequently the entire chain of glands is enlarged, some being exceedingly small, but very distinct, and sometimes the glands on both sides of the neck are implicated. They present firm, painless, non-adherent growths, quite movable, and feel as if they were connected the one with the other, which in verity they are, by enlarged and thickened lympathic vessels. Occasionally large masses are met with, made up of several small glands held together by dense areolar tissue, not, however, completely fused, as the capsule of each, although markedly thickened, is perfectly distinct. The centre of each gland, if examined, will be found to contain soft, cheesy matter, somewhat resembling the curd of milk. This I have seen in very slightly enlarged glands, so that it would appear to be an early condition of change, and is not evidenced by any inflammatory state, such as redness or excessive sensibility. If the enlargement is left to itself, or if irritated by some local application, suppuration will advance. The skin over the growth inflames, becomes red and tender, the abscess, for such it is, soon bursts, and a thin, curdy pus is discharged. The areolar tissue around the gland is involved, and the skin becomes adherent. The abscess cavity, after the discharge of its contents, may fill up and close. More often, however, an indolent sinus is left, with thin, purplish undermined edges, or the integument may ulcerate, giving rise to a troublesome and unhealthy sore, which heals with difficulty. This constitutes the well-known strumous ulcer. If the sinus or ulcer heals, it leaves a depressed cicatrix, which becomes adherent to the deeper tissues. Occasionally prominent papillæ remain bound down by cicatricial ridges or bands. Resolution, after a fashion, does, in exceptional cases, occur without suppuration and discharge of pus. The caseous matter becomes dry, the enveloping capsule becomes firm and dense, and an indolent, but somewhat unsightly, nodule remains, but which does not wholly disappear.

Another clinical feature of these so-called scrofulous glands is the tendency to extension to other unaffected glands in their immediate neighborhood. The disease will show itself, it may be, in a single gland, and will in due course extend, so that the entire chain of glands become implicated, thus showing a marked contrast with enlarged glands from other causes, these latter are generally single, and do not tend to implicate others. Constitutional remedies do not appear to possess any controlling power, but, like a smouldering fire, the action will go on regardless of all attempts to arrest it by either local applications or constitutional remedies. The disease, if left to itself, or if treated by internal and local means, will be found to follow the same course as above described. Abscesses will form and open, sinuses or ulcers be left, which in due course, if they do heal, will leave the part seamed, scarred and disfigured. While this local injury is in progress, we cannot prevent the infection of other vital organs, as this bacillus is in length about one-third the diameter of a blood-corpuscle, and in thickness it is stated to be one-fifth of its own length. A micro-organism of such a size is capable of entering the blood-stream, or of getting into lymphatic vessels, and of being carried to any organ or gland of the body. It naturally follows that if tubercle is in verity a mere inflammatory change due to the presence of this microbe, the sooner the microbe is removed the better, and the safer for the patient's life.

Very little is known concerning the actual mode of entrance of the microbe. Various theories have been proposed on this point, and perhaps all are correct, as they possess the semblance of truth. There is, however, one other fact in this connection to which experience points, which is, that individuals are not subject in the same degree to the chances of infection. It has been supposed that the bacillus may enter by the stomach or lungs, or some abraded surface, cuticular or mucous, and yet do no harm. The power of protection appears to reside in healthy-living tissue. But if there is some defect in constitution, some special vulnerability, the microbe meets with suitable soil, and

will there develop. It has been suggested that the peculiar soil in which the bacillus grows may with propriety be called scrofulous, and that the seed itself, the consequences of its growth and the manifestations which follow, would more properly come under the heading of tuberculous. Another point of great importance is that concerning the development and multiplication of the bacillus. Koch has pointed out that the larger the number of microbes introduced by inoculation the more rapid will be the diffusion of tubercle, until it becomes general. He has also described the mode of multiplication of the microbe by fission and the formation of spores. Such, then, being assumed as true, it naturally follows that to delay the removal of an infected gland is to expose the individual to the risk of general tubercular infection. But we have positive evidence on this point: it is within the experience of most of us that phthisis in many instances can be traced to or connected with scrofulous glands of the neck, or some other tuberculous affection either of the bones or joints or of other tissues in which the local malady preceded the general diffusion. And I think we can record other facts in this connection in which the removal of diseased or enlarged glands or of tuberculous joints has been followed by general improvement in health. Such general improvement will follow after the healing of sinuses or ulceration, which is the sequence to the discharge of pus from a tubercular abscess.

But what a contrast is the part which is left to nature with that which has been early dealt with by the surgeon's knife. In the one instance, the individual, after being subjected to the risk of general tuberculosis, will recover with the part seamed and scarred in every direction with adherent and puckered cicatrices, and this probably after years of suffering; in the other, the disease is at once removed, the patient is to a certain degree protected from infection by the entire removal of the diseased tissue, and this at the expense of a simple and not hazardous operation, a week or ten days surgical treatment, and ultimately a scar, which is not more than a narrow, thin white line, and which in some instances is scarcely perceptible. This radical method of treatment is, to my mind, preferable to that adopted by some surgeons, as laying open the part and scraping all diseased tissue away. In cases where sinuses and ulcers remain, I should think the use of the spoon would be attended with good results, but even in these cases where there remains a ragged opening with thin undermined edges, it appears to me that removal of the entire diseased mass, freeing the skin from deep attachments, and bringing the edges carefully together, is a better method of treatment than that by the spoon.

Mr. Treves recommends the use of the fine point of a thermo-cautery, which he thrusts into the gland and passes it in several directions in the gland tissue. This method I never have employed, and I must say that it appears to me an unsurgical proceeding. I should trust alone to complete removal by the knife, and I may say that so far, I have not met with any case in which the entire removal has not been applicable. After removal, the subsequent healing is rapid; very frequently two or, at most, three weeks has sufficed to produce perfect union, and the subsequent scar has been slight and in time scarcely perceptible.

Case I.—On the 17th April, 1873, I was consulted by a gentleman, aged 27, with a large glandular tumor situated on the right side of the neck, extending as high up as the ear. It was nodular, firm, and appeared to consist of several glands held together by dense fascia; it was to the inner side of the sterno-mastoid muscle, and was quite moveable. The tumor had been there for some two years, and had proceeded apparently from cold and exposure. For over twelve months he had been under treatment, various applications had been made, and the directions of his surgeon had been implicitly followed. He had taken iodide of potash, cod-liver oil, etc., without the slightest effect on the growth. When seen, the growth was the size of a goose egg. I recommended its removal, and the operation was performed on the 21st April, 1873. This man, although he had recently returned from England, was pale and looked out of health; he was weak, an unabled to stand much fatigue. The wound united by first intention. It was before the days of strict antiseptic precautions. Silk sutures were employed, a drain was inserted, and the wound dressed with wet lint and oil silk. Four distinct glands were removed, and were all in a state of softening and contained pus. This I con-

sidered remarkable at the time, because there was no external evidence of such an event as suppuration having occurred. The following autumn he returned with an enlarged glandular growth lower down, and apparently beneath the sterno-mastoid muscle. This was removed on October 13th; three small-sized glands were removed with ease without disruption of their capsule, and in each instance the gland was found in a condition of caseation. Recovery in this instance was rapid; the wound closed in the course of ten days. I met this gentleman during the early part of the present month, August, 1886. He is robust and healthy in appearance, and the two scars in his neck are so indistinct that they would be readily passed over by a casual observer.

CASE II.—March, 1874.—This was a young woman, aged 27. She had a glandular growth situated near the angle of the jaw on the right side. Had been under treatment for several months. The iodide of lead ointment had been used, and other internal remedies. She was pale, thin, and with a phthisical family history, her mother, a sister and a brother having died of phthisis. She consulted me in regard to the tumor, which was most unsightly. I advised its removal, and the operation was done on the 23rd March following. A single straight incision was made and three distinct glandular masses, softened and breaking down, were removed. A portion of the skin over the growth, which had thickened and was adherent, had to be taken away. Recovery was rapid. Six months after the removal this patient had greatly improved in personal appearance, and a very slight whitish scar was visible, but it was soft and non-adherent to the deeper parts.

CASE III.—M. R., aged 20, admitted into the Montreal General Hospital in April, 1883. This patient had been operated on before, and several glands removed from the upper part of the neck. There was a chain of glands, enlarged, extending down almost to the clavicle; two at the upper part, a little below the angle of the jaw, had suppurated, and several sinuses led into a lot of gland tissue, which was disintegrating and discharging. This gave her great annoyance, and had a marked effect on her general health. She was pale, anæmic in appearance, had a very anxious, troubled look, and was very much depressed in spirits. I recommended their removal, and she willingly consented. The operation was performed on the 25th April. An incision to the outer side of the sterno-mastoid and reaching to the clavicle had to be made; from this quite a number of glands were removed—in fact, all that in any way were enlarged. Several were open and were discharging pus, these being situated at the upper part of the wound; lower down they were small, but all had softened, and contained cheesy matter. With some considerable difficulty they were all removed, the edges of the skin pared and brought well together, and the wound dressed in the usual way after Lister's method. The spray was used throughout the operation and subsequent dressings. On reference to my note-book, I find that the wound had quite closed on the 15th May, but she did not leave the hospital for several days thereafter. I may state that this young woman is at present in robust health, and from being a weak anæmic girl, she is now making rich blood, and has greatly improved in appearance. The scar is white but perfectly free, soft and pliable, and unattached to the deeper parts.

I have the notes of some eight cases in private besides ten or twelve performed at the Montreal General Hospital, making over twenty cases that have come under my own observation. In all the results have been quite satisfactory. The general health of all these patients has been greatly benefited by the removal of the glands. Several, from presenting an appearance of decided ill-health, exsanguine, anæmic, and in a state in which you would suppose a general break-up was threatened, have markedly changed for the better, and assimilation has greatly improved. Several of these patients have become quite healthy and robust, have increased in weight, and have in no way suffered from the removal of these important organs, which were in verity, before their removal, so damaged as to possess little, if any, functional activity. I cannot do better, in this connection, than endorse the conclusions of Mr. Pridgen Teale, in some very excellent clinical remarks made by that surgeon in reference to tuberculous glands: "That surgery can secure the healing, in a very few weeks, of sinuses and cavities leading to diseased or tuberculous glands, even though they have existed for years, and that in cases of caseous and suppurating glands, the action of the surgeon should be vigorous and thorough."

CASE OF DILATATION OF THE STOMACH ARISING FROM CANCER OF THE PYLORUS.*

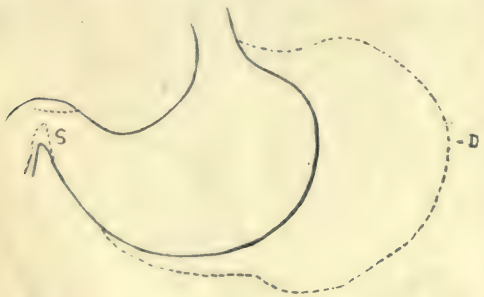
BY R. W. BRUCE SMITH, M.D., C.M., SEAFORTH, ONT.

The case which I have been requested to report to this meeting, has in it some peculiar features to which I shall call your attention in the few hurriedly written notes I have before me. The case is that of H. R., a prominent citizen of this town, who died last week at the age of fifty-four years. His family history was good, both of his parents having lived to old age. He worked hard for many years as a carpenter and builder until about eleven years ago, when he noticed what he considered were symptoms of dyspepsia coming on. These symptoms gradually grew worse, and by those who saw him at the time his sufferings have been described to me as most severe. He suffered great pain, with nausea and vomiting. He became rapidly debilitated, and his appearance in every way indicated that his condition was most serious. After a few weeks, hemorrhage became almost a constantly recurring symptom, so that during the next fortnight he would several times a day, when vomiting, eject quantities of blood. Suddenly, however, there occurred a remission of the anorexia, pain, hemorrhage and vomiting so that the patient believed he was recovering and was able to take plain nourishment in small quantities. The natural condition of the stomach seemed to have returned and he was soon able to do light work. The medical men who had seen the case were as much surprised as they were pleased to notice this remarkable change. Their diagnosis had been cancer of the stomach, and although their patient seemed to be recovering, they did not waver in their opinion. I may depart from this subject to note the fact that one of the medical men, Dr. H. L. Vercoe, a man highly esteemed in the profession, has himself died of cancer of the intestine since the apparent recovery of the patient, whose case I am to-day reporting to you. I well remember Dr. Vercoe relating to me the peculiarity of this case and assuring me that he still believed there was malignant disease of the stomach in the case of Mr. R. His consultant in the case had been Dr. Gouinlock, now of Warsaw, N. Y. Since the time when Mr. R. began to recover from his severe illness, his condition, as I have said, continued to gradually improve, and two years afterwards he visited Scotland and seemed to return with renewed vigor of body and mind. In company with his sons he continued for several years to manage a grocery and a large meat packing establishment having at times a great deal of responsibility resting upon him. He however enjoyed fairly good health although he had at all times to exercise great care over his diet, any irregularity in which would bring on the distressing vomiting, similar to that of his former and much dreaded illness. He received little or no medicinal treatment. He had a powder composed of bismuth subnit. and sodii bicarb. and a pill of nux vomica, with which he told me he regulated any slight attack of indigestion that might arise. His appearance, although not rugged, bore no evidence of any serious ailment. On November 30th and December 1st he had long drives amounting in all to about 60 miles, and was exposed to cold and went home on the evening of December 1st, thoroughly chilled. I saw him on the following morning and found him with both temperature and pulse normal, but suffering greatly from nausea and unable to retain anything on his stomach. I prescribed lime water and milk with 10 grs. of lactopeptine combined with sodii bicarb., and this relieved him for a few days, after which all the symptoms of the illness from which he suffered eleven years previously, with the exception of the pain, returned. Liquor bismuthii was tried with success for a few days, but like the other remedies seemed to only afford temporary relief. It is not necessary, gentlemen, to occupy your time by reading to you all the notes I have on this case. The patient gradually became weaker and the stomach refused to bear all nourishment, and latterly everything was vomited shortly after being taken. The bowels were constipated throughout. A splash or succussion sound was plainly heard on shaking or moving the patient, and when a large mouthful of fluid was swallowed it could be distinctly heard dropping into the enlarged cavity. These latter diagnostic signs were more marked than I had ever seen them before, and convinced me that the amount of dilatation must be very great. The irritable condition of the stomach continued, and nothing but small quantities of peptonized milk

*Read before the Huron Medical Association, Jan., 1887.

would be retained longer than an hour. Owing to the very weak condition of the patient, and the apparently hopeless nature of the case, rectal alimentation was not resorted to. He died of exhaustion after being confined to the house for 36 days, and he assured me the day before death that he had scarcely felt a pang of pain during his illness. In his sickness eleven years ago his pain was very severe. At that time he had frequently vomited blood, this time no appearance of hematemesis was manifest until shortly before death.

Post Mortem.—Having secured the consent of the family, a post mortem examination was made twenty-eight hours after death, at which I was favored with the presence and assistance of Drs. Campbell and Scott. After exposing the viscera, we found the stomach greatly enlarged and extending down into the lower portion of the abdomen. The liver was crowded out of its normal position, until the left lobe had taken the position of the right, and the latter was occupying a more central position. Between the stomach and the liver the result of local peritonitis was seen in numerous



adhesions, most of which bore evidence of not being of very recent origin. The gall bladder was found higher up than usual, and between it and the muscular coat of the stomach near the pylorus strong adhesions were found. The coats of the gall bladder were broken down and the contents escaped. The liver was about normal in size and color, although there were slight patches of discoloration, these were probably due to the escaped contents of the gall bladder. I have made a rough diagram representing as well as I can the size of the stomach, and indicating the site of the malignant disease.

Measuring the greater curvature as shown in outside dotted line, we found it to be 30 inches, and that a straight line from the cardiac orifice to the pylorus was 19¼ inches. In the stomach was found about a quart of fluid, of black yeasty appearance, and intensely sour in smell. The mucous lining of the stomach was found slightly congested, but free from any appearance of ulcerations. You will note in the diagram the site of the malignant growth, which under the microscope was found to be scirrhus. It extended slightly into the duodenum on one side. Under the microscope the fibrous stroma appears far in excess of the cell element, but the latter is sufficiently distinct to fully demonstrate the nature of the growth. The stenosis was most marked, the pyloric orifice being reduced to the size of an ordinary lead pencil.

One of the peculiar features of this interesting case was, as you will notice, the great length of time that elapsed between the first appearance of those symptoms, which lead to the diagnosis being made of cancer of the stomach, and the second attack—eleven years. I believe that this case establishes the fact that during the course of cancer of the stomach we may be often much puzzled by a remission of the anorexia, pain, hemorrhage, and vomiting, and have such improvement seeming to take place that the patient believes he has recovered. In this case two careful practitioners after diligently studying all the symptoms of the case, announce the fact that the patient is dying of cancer of the stomach. The patient's condition suddenly improves, and shortly afterwards he resumes every day work. For eleven years, although not very strong, he enjoys comparatively good health, and has suddenly a return of all the old symptoms with one notable exception—the pain is absent. Then after a week's illness the patient dies, and a post mortem examination reveals the fact that the diagnosis made eleven years previously is verified.

COMPOUND FRACTURE OF THE LEG, TREATED BY PLASTER-OF-PARIS BANDAGE.*

BY DR. CAMPBELL, SEAFORTH.

W. H, æt 37, a native of Canada, laborer in the Seaforth Salt Works, when working at his occupation of raking salt, the following accident took place. He allowed a book to fall down between plates of iron which were leaning against

*Read before the Huron Medical Association.

the wall. These plates each weighed 450 lbs. The book having fallen between the second and third plates, he undertook to separate them, by pulling two of the plates towards him. He found, however, that they were too heavy and he was forced back with his load, when he tripped on a plank which was behind him, and fell with 900 lbs of metal on the top of his legs. The edge of the plates pressed in his right knee breaking both bones of the leg four and a half inches above the ankle. He was taken home and his boot pulled off, when it was found that the ends of both bones had not only come through the skin, but through a woollen sock as well. The hemorrhage was pretty severe, but yielded at last to pressure and plugging with surgical cotton wool. The wound was dressed in the blood with the surgical wool well sprinkled with iodoform placed over the orifice, the whole being covered with lint and oil silk. It was then placed in a fracture box in which it was kept for four weeks, and carefully watched but the wound never exposed during all that time. Pain was relieved with Wyeth's pellets of morphia. Therewas no bad odor from the wound, no pus discharged and no elevation of temperature during the whole period.

At the expiration of the four weeks the wound was found almost completely healed, there being only a small granulation about the size of the point of the little finger remaining to shew where the wound had been. This we touched with argent. nit., after which, with the aid of Dr. Smith, we put on a well-fitting plaster of Paris bandage which was left on for seven weeks, after which time it was taken off and the patient furnished with crutches which he used for a time.

Sixteen weeks from the time of the accident he walked by the aid of a staff, and twenty-one weeks from date of fracture began his old business, and has worked at heavy work ever since, and suffers no inconvenience whatever. The present condition of the patient is good; there in no pain in the limb, the union is perfect and there is not the slightest deformity.

The patient was examined by the members of the Association, and the result proved to be an excellent one. Dr. C. strongly recommended the treatment of this formidable accident, which used to be so unsatisfactory, and in many cases fatal, by the plaster bandage aided by iodoform and sealing the wound in the blood. The treatment of simple fractures of the leg and arm by this method was eminently successful and gave the surgeon very little trouble.

Correspondence.

POST MORTEMS AND POST MORTEMS.

To the Editor of the CANADA LANCET.

SIR,—As it may be somewhat instructive as well as amusing to your many readers, I thought I would give you a description of a Post Mortem examination recently held in the State of Michigan. This morning I was called upon by a brother knight of the scalpel, and asked to assist him at a P. M., on the body of a child, found dead in bed on the morning of the 31st ult. I accordingly went with him more to see the "performance" than for any other purpose. I might here state that there was to be an *inquest*, by one of the J. P.'s of the Township. After the jury (of six) was assembled and sworn, my colleague and myself proceeded to our part of the work. The body was brought into the room where the inquest was to be held, and "viewed," not only by the jury but by the company at large. My brother of the scalpel produced a jack-knife and what seemed to be a jeweller's tongs (which I found out afterwards to be so.) He then proceeded to make the P. M. He made an incision, from the superior end of the sternum to the tip of the ensiform cartilage. Then dissecting back, he soon had the sternum and cartilages turned over the face of the corpse. He then turned out the right lung and gave the jury a lecture on it, showing the difference between hypo-static congestion and congestion from suffocation. He then proceeded the same way with the left lung. He next raised the heart into view, stating at the same time what he expected to find there, and with his "knife" made two "slashes" into it, and looking very wise, shewed to the admiring jurors and spectators present that *he* was correct. This finished the P. M. He was then duly sworn and gave his evidence accordingly, I was then sworn and had of course to corroborate my senior's evidence. One thing which struck me as being very odd was that the father of the child was absent and was not called as a witness. The J. P. seemed very proud of his position, but ad-

mitted that this was his first case of the kind. This is how they do things in certain parts of Michigan, and the medical ethics and etiquette are treated in about the same way. There is a code, but no one pays any attention to it, not even the leading light of the profession.

Yours, etc.,

MEDICO.

Michigan, Feb. 1, 1887.

Reports of Societies.

CHATHAM MEDICAL AND SURGICAL SOCIETY.

Chatham, Feb'y 4th.

The President, Dr. Rutherford in the chair.

Dr. Bray reported a case of double synchronous amputation of the upper extremities in a boy, seven years old, with a good result. The injury necessitating this operation was the crushing of both arms by a shunting railway car. One limb was taken off about two inches from the shoulder, the bone not being shattered into the joint; the other, about the middle of the forearm. Dr. Bray wished to know if his treatment was correct or should he have disarticulated at the shoulder joint. Most of the members present thought he pursued the proper course.

Dr. Rutherford related the case of a boy, shot in the palm of the hand, the bullet lodging about two inches above the wrist. The bullet was removed and both wounds were closed with lint soaked in compound tincture of benzoin, with compresses of wadding over this. Both wounds were perfectly healed and the boy able to return to his work in four days.

Dr. Holmes narrated a case of suppression of urine, which will be published in full at some future date.

Dr. Bray read a paper on the treatment of pneumonia, dividing his cases into children, adults and those over 45 years old. Children; first clean out the bowels with oil or rhubarb and soda, with a little grey powder, then give a mixture of spts. mindererus, æther nit. and in some cases tincture of aconite, with small doses of quinine. At the same time envelop the chest and back with hot linseed poultices, applying a lint or two over the chest if there be great dyspnœa. After the acute symptoms have subsided, substitute a cloth soaked in chloroform liniment, B. P., and covered with oil silk, for the poultices. If cough be troublesome, a stimulating expectorant of carbonate and muriate of ammonia with squills, and senega is given. Diet on milk, adding lime water and pepsine when necessary. He rarely gives anodynes to children, except when acute pleurisy is present. If the latter be subacute with much effusion he applies iodine or cantharidal collodion. Adults; much the same treatment will suffice, but pain must be controlled with anodynes. If the heart be weak, leave out the aconite and add digitalis to the mixture given in the acute stage in children, also give stimulants in the form of brandy or whiskey. The great danger in these cases is from heart failure and this must be guarded against by every possible means, medicinal and dietary.

In the last class of cases stimulants must be given from the first. In these cases especially, avoid blisters and all depressing measures. The reader of the paper has seen nothing to convince him that pneumonia is contagious; but believes that climatic and atmospheric influences produce endemics and epidemics of it. When pneumonia is epidemic, give stimulants early and a guarded prognosis.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Montreal, Dec. 15th, 1886.

J. C. Cameron, M.D. President in the chair.

Dr. W. G. Johnston exhibited a specimen of aneurism of the innominate artery, which had eroded the sternum and first and second ribs on right side. The arch of the aorta was unaffected. The right carotid and right subclavian were given off from the sac. The left carotid and left subclavian pressed upon and pushed over towards the left. The superior vena cava was obliterated through pressure at a point two inches above its origin. Azygos vein enlarged to the size of the ring finger, and communicated by a large branch with the superior intercostal vein. Superficial anastamoses of epigastric and hypogastric veins were prominent. Hêmorrhoidal veins normal.

Dr. Ross said that the patient had been under his observation for eighteen months, and was never recognized as a case of aneurism of the innominate

artery, but the symptoms pointed more to the arch of the aorta. The earliest symptoms were pain at the back of the neck and shoulder of a neuralgic nature, accompanied with cough. These were relieved by potassium iodide. The patient got better of his first attack, but was frequently laid up in hospital. Enlargement of the superficial veins of the abdomen and thorax was early evident, but lately the superficial veins were tortuous and as large as a man's finger. The patient also exhibited signs of intra-thoracic pressure—such as paralysis of the right vocal cord, rattle in the larynx, and signs of pressure on the trachea.

Dr. R. L. MacDonnell who had had the case under observation for the last fourteen months said: There were two points of clinical interest in the case. In the first place, the results of the use of the sphygmograph were deceptive. The tracings obtained showed very marked interference with the blood current through the left radial, hence he had assumed that the aneurism was situated on the arch at a point beyond the giving off of the innominate artery, the fact being that the great dilatation of the innominate artery caused not only an impediment through that channel, but by its bulk had pressed upon the subclavian and disturbed the flow of blood to the left upper extremity. In the second place, the relief afforded by the iodide of potassium had been most effectual. Whenever the drug had been discontinued, or whenever the patient had been unable to obtain it, the pain and dyspnœa had increased.

Dr. Wilkins referred to a case in his practice where there was obliteration of the superior vena cava from clot, which produced no varicosity.

Dr. Ross said one of the early symptoms of the case was a suffused appearance of the face, but the varicosity did not progressively increase; it was sudden and at the last.

Dr. Johnston exhibited for Dr. Nealson specimens from a case of typhoid fever complicated with diphtheria. There was a well defined membrane covering the fauces and extending through the larynx to the smaller divisions of the bronchial tubes. The spleen was enlarged, and there were typhoid lesions in the intestines.

Dr. R. L. MacDonnell exhibited the skull of an idiot which had been dissected at McGill College. There was on both sides deficient development of the petrous portion of the temporal bone. The base of the skull, as seen from within, was flat, the petrous bone not forming the normal ridge between the middle and posterior fossæ. The organs of hearing had never reached development, there being in reality but a rudimentary tympanic cavity. The foramina through which the various nerves passed were small. No previous history of the case had been obtained. The subject presented several other abnormalities. 1. The right common carotid divided into its external and internal division opposite the lower border of the thyroid cartilage. 2. The left common carotid did not divide at all, but was continued upwards as the internal carotid, the superior thyroid and lingual arteries were given off this common trunk, and the facial from the lingual. 3. The hypoglossal nerve was given off from the pneumogastric. 4. There was deficient development of the teeth. The bicuspids were represented by small round pegs. The molars were ill formed, small, and rounded like milk teeth.

Dr. Wilkins, 1st Vice-President, then took the chair, and Dr. Cameron read a paper on "*Aseptic Midwifery.*"

Dr. Kennedy agreed with Dr. Cameron in his conclusions. He rarely allowed a patient to have a douche; always believed in using it in person, as he found nurses, as a rule, unreliable. He could tell by the temperature chart in the hospital which nurse had charge of a ward. He did not believe in the use of a douche unless there had been operative procedure.

Dr. Roddick said he had long believed antisepsis to be as important in midwifery as in surgery; but from his experience, as well as from the facts in the paper, he now regarded it of even more importance in the former. In 1877 he had been asked to give some rules for the guidance of a friend, then superintendent of the Hamilton Hospital, and had laid stress on the use of antiseptic injections previous to delivery, as before operations in surgery. The results were good in Hamilton, though only tried for a very short time. He thought the excellent results obtained in the Queen Charlotte Hospital were largely due to the previous washing out of the vagina, as the discharge before labor was often septic.

Dr. Alloway said that owing to the acceptance of aseptic midwifery the mortality had notably decreased during the past five years. It is rare now

to hear of septic cases, much less of death. For the last five years he had been an antisepticist, and had not witnessed a single death during that period, though, through nurse or midwife examining patients, he has seen many cases of septicæmia. He cited, as an example, where one midwife had lighted up several septic cases. Dr. Roddick's importation of Listerism had induced him long ago to apply it to midwifery cases. Dr. Cooper of New York reports 40,000 cases in Vienna with results similar to those stated by Dr. Cameron. He (Dr. Cooper) insists on using corrosive sublimate whenever there is any abrasion of the vagina.

Dr. Trenholme said he had never had a case of septicæmia in his practice, though he never uses a tube, and believes this result due to the great care in removing the membranes and placenta entire.

Dr. Shepherd called attention to the results, as stated by Dr. Cameron, of removing by the curette any adhering portions of the placenta as soon as septic symptoms appear.

Dr. Cameron, in replying, stated that the use of the jute pad and iodoform to the vulva after delivery was analogous to the mode of stopping a test tube in germ culture. There is always danger of carrying in the air with the douche, and for that reason he prefers the dry dressings.

Selected Articles.

EXAMINATION OF THE URINE.

BY J. MILNER FOTHERGILL, M.D., EDIN.

When I was a medical student—a good many years ago—I was taught with scrupulous care how to examine the urine for albumen and sugar; but long years of practice have taught me that it is much easier to detect the presence of either of these substances, than to make out their significance when found. The simplicity of test-tube examination possesses a certain fascination for some persons. Albumen is found, and of course Bright's disease is afoot. Sugar is found and behold the dreaded *Diabetes Mellitus* has laid its mortal grip upon the patient. This is all very well if it only happened to be true! There is where the hitch lies. For that class of mind which can only see the gravest aspect of any subject, this is all very well. Some people can never restrain themselves from exhibiting their cleverness in the shape of letting one see they know and realize the full significance of what they discover. How many medical men took to their beds to die when they found albumen in their urine, soon after Bright drew attention to albuminuria; but finding that the King of Terrors did not call for them threw off their apprehensions, left their beds, and went back to their work? A great many more than care to say much about it. What Dr. Bright did teach was that "when dropsy was found with albumen in the urine then disease of the kidney was present." But very soon the dropsy factor got left out, and albuminuria alone involved Bright's disease. This shows as Franklin Blake said in "The Moonstone;" viz., "We English are the most slovenly thinkers in the world except when making machinery." But in this case the English do not stand alone in slovenly thinking. The medical world at large simply took leave of its senses I do not for one moment wish to convey the impression that the reaction of the urine in a test tube is not to be noted; only it does not work well in practice to attach undue and disproportionate importance to one symptom, to the exclusive and comparative neglect of others. Yesterday a patient at the hospital with syphilitic cachexia brought some urine as she had been directed to do by my clinical assistant. I told him it would probably be albuminous. He examined it, and found one-fourth albumen Now what light does this clinical fact throw upon that particular case? I am bound to admit that I, at least, do not know. The darkness is unillumined by it; but my *belief* is that her cachectic state is largely due to the loss of albumen by the kidneys rather than that there is any kidney disease present.

This is an aspect of albuminuria in my opinion, too little considered. If there exist a constant drain, no matter whether of serum-albumen or peptones, the system will be imperfectly nourished. A case came under my notice two years ago in the form of a Cambridge undergraduate who was pale and weak, and feeling unfit for his work. Albumen was present in the urine in unmistakable quantities. In that case two views could have been taken up, and maintained perfectly honestly. My opinion inclined to the case being one of malnutrition in which the loss of albumen played a part. At any rate the lad got well, and the albumen disappeared from the urine. But because such cases do crop up, the systematic examination of the urine need not be flung aside like an obsolete weapon. Then again persons who have had malarial fever are very apt to pass some albumen. One well-known surgeon left India and came home believing that his health was broken and gravely impaired; but after ten years he is still hale and vigorous. We often talk the matter over, and regret that so much misapprehension exists on the subject. In any interference to the portal circulation, albumen is liable to show itself in the urine. When the interference is removed the albumen disappears

Bearing in mind these facts, the obvious conclusion is this: It is not proper to assume that albuminuria indicates Bright's disease. A medical man has no moral right to alarm a person by announcing Bright's disease merely on the discovery of albumen in his urine. It is as unjustifiable as to inform a man his house is on fire merely because his chimney is ablaze. Before saying anything to the patient the urine should be carefully searched for tube-casts, and if they are discovered then the announcement is justifiable, but not until. Of course, no man but a fool or a crank would undervalue the significance of the evidence furnished by the test tube. Say it is a case of cardiac dropsy. The appearance of albumen in the urine while the case is under treatment is almost the herald of dispair. But here the circumstances of its appearance are known; but if a patient comes under notice with cardiac dropsy, and the urine is found to be albuminous, its significance is by no means so ominous. Any cause of venous fulness in the kidney may give rise to albuminuria; but it is very important what the cause is, as that will determine the significance to be attached to the albuminuria. An albuminous condition of the urine derives it import from its associations, and the men who disturb the peace of a family merely because the urine in the test tube gives evidence of albumen, are scarcely fit for their vocation, and certainly take a very oblique view of the moral obligations of a family physician. Again as to the presence of sugar in the urine. Many medical men have lost their heads in a manner nowise creditable to them on finding some sugar in the urine, whether their own or that of some one else. The discovery of sugar should at once put the medical man on the alert, just as does the discovery of albumen. In either case the medical man should at once be upon his guard; but this is a very different matter from abruptly delivering an adverse opinion. The latter is very much like condemning a suspected man without going through the preliminary of a trial to ascertain if he is guilty. The evidence against him at first sight may seem damning, but the process of trial may demonstrate his innocence and not his guilt. When albumen or sugar is detected in the urine of a patient, then a searching examination into the facts of the case is incumbent upon the part of the physician.

As to sugar, corpulent persons often pass saccharine urine, and epecially corpulent, gouty persons. What significance glycosuria possesses under the circumstances is unknown to me. One such case has been under observation for over eighteen months. There were other symptoms present telling that the case was something more than mere glycosuria. While allaying the lady's apprehensions as to any immediate danger, both she and I firmly believe she will die of diabetes And why do we both believe this? Because from family circumstances she is subjected to worry and annoyance from which she can not emancipate herself. But as to other cases they seem to go on for years without any deepening of the condition. There are other circumstances, however, under which glycosuria is found which give it much significance. All physicians of any experience have met with cases where an acute condition of diabetes is started by a sudden shock or fright. Such associations are matter of notoriety. But the association of chronic *diabetes mellitus* with mental conditions is far less generally realized. Yet those who are giving special attention to the subject are beginning to be strongly of the opinion that diabetes is casually dependent very often upon "carking care," disturbing the liver as regards its glycogenic function. If this view can be substantiated, and I for one think it can, then the appearance of sugar in the urine, even in small quantity and fitful as to presence, is terribly suggestive. If such a case be watched it will be found to deepen in gravity; for a while a strict diabetic dietary may afford relief, but it turns out to be a case of "the further in the deeper." Of course this is the more likely to occur if the patient continue to carry his load of care. If, however, the load be lightened the result may be otherwise. The glycosuric condition may remain static for years. With one such case I am intimately familiar.

Diabetes—not merely glycosuria, but something more—is a malady which does not necessarily progress with steady, relentless tread to the tomb. We must learn to regard it as a disease which may take its origin in small beginnings and deepen to death; or be arrested, as the case may be, and according to what measures are taken. If this view be well founded the appearance of sugar in the urine is fraught with high significance. Nor is the difficulty to be met by gluten bread and almond biscuits. That is the narrow not the wide view of the subject. When a hard-working business man is a patient, in my opinion, a regular periodic inspection of the urine should be made, and when traces of sugar even are detected, to keep a keen watch over the patient. If small quantities are pretty constantly present, then he should be told frankly and honestly his true position, and the facts looked in the face. Such a man will be liable to temporary aggravations of his condition on any passing extra mental perturbation. Such a case is well-known to me, where a glycosuric man is a diabetic when anything gravely puts him about. In such cases the urine varies hand in hand with the general condition; and the urinometer will register the case pretty accurately. Then there are cases of glycosuria where the amount of sugar is considerable in the urine passed three hours after a meal; while the urine passed in the morning contains but little

sugar. Speaking broadly such a condition carries with it a better prognosis than where the morning urine differs little from that passed at other times.

Sugar, like albumen, in the urine is a stiff hint to a medical man to put on his studying cap? As to the presence of phosphates in the urine, they may merely be made visible because the urine is not acid enough to keep their solution. It gives a patient a greater interest in himself and his maladies to tell him he has phosphates in his urine; especially if at the same time the impression is conveyed to his mind that phosphates do not belong to healthy urine. Even if they be present in considerable amount it is not easy to appraise their import, since Sir William Roberts, F.R.S., in his well-known treatise on "Urinary and Renal Diseases," says:—"There is not the least reason to believe that there is any constitutional state specially characterized by and excessive excretion of phosphates."

If in what has been written here the reader detects a latent contempt for test-tube examination of the urine, he will kindly please to understand that the contempt is not felt for test-tube examination of the urine—certainly not—but for the way it is too often done! No medical man ought to give an opinion on one examination of the urine. Of course in consulting practice one has too often to remain contented (or may be discontented) with one examination; and as a consequence of this, the examination of the urine of one twenty-four hours falls into a subordinate place in the diagnosis. One has to teach oneself to observe the other features of each case. And there is one matter about the urine of the very highest importance and significance in my opinion, and that is—the patient's account of it! How much he passes; if he gets up at night to pass it; what it is like when it is passed; and what it is like when it has stood over night in a cool place.

When the urine of an animal possessed of a four-chambered heart and a fluid urine, deposits, on cooling, a quantity of urates—the form of urinary excretion belonging to animals with a three-chambered heart and a solid urine—depend upon it, the kidneys will suffer sooner or later for this reversion on the part of the liver. Human kidneys are not constructed to excrete the comparatively insoluble urates; and if they have to do so for a continuous time they become injured. If the urates are formed in large or considerable quantity, one of two things must occur, (1), the kidneys are injured by the out-put; or (2), the urates are retained in the system as gout. The first gives Bright's disease; the second gout in some form. Often the condition is a blend of the two. If the bulk of urine be habitually small, some obstruction to the blood flow in the pulmonic circulation (heart or lung) suggests itself. When the flow is copious and the color pale, and the specific gravity low, Bright's disease with the large left ventricle, and the hard artery—with the resultant high arterial tension—is fairly certain. This is rendered more probable if at the same time the patient gets up at night to empty the bladder. Why he does so is too long a story to be told here. Examination of the urine as regards the patient's account of it, is grossly neglected; just as the reaction of one sample of urine in a test-tube is too highly estimated at the present time. And if the points put in this paper be conned over by the reader, and applied to his cases under care, I venture to think some mistakes—potential or actual—may be avoided. A negative lesson it certainly conveys. Let not the reader abandon test-tube examination of urine; but let him make it more perfect and more extended as to time and duration of observation. What I do denounce—and I do not denounce it more heartily than I detest it—is the too common practice of giving grave opinions from a casual observation. And to point out the sources of fallacy, as has been done, is the only way to secure more careful examination. Certainly no patient should be told he is the victim of Bright's disease until a patient microscopic examination has been made. In the same fashion must the significance of sugar be determined—only here the microscope can lend no service; viz.: by common sense and special knowledge. Rash medical opinions rapped out on insufficient evidence may appear to establish the cleverness of the utterers; but it is positively certain they have added a distinct amount to the sum total of avoidable human misery; and therefore constitute a practice to be heartily denounced and reprobated by every one who loves his fellow-men.—*New England Medical Monthly.*

SOME POINTS IN MINOR SURGERY AT THE PENNSYLVANIA HOSPITAL.

Dr. Thos S. K. Morton *(Medical News:)* Shock is combated usually by warmth and stimulants. The former is applied by means of hot baths or water bags, generally the latter. The patient is surrounded by rubber bags filled with hot water. These we have had made for the purpose. They are round, from one and a half to two and a half feet long, from four to six inches in diameter, and have a filling-hole with a screw cap at one end, and a handle at the other. Atropia is freely used. Whiskey, ether, digitalis, aromatic spirits of ammonia, or, in desperate cases, aqua ammonia itself, was given. The injection of pure ammonia is, of course, always followed by local sloughing. Mustard, hot fomentations, large enemas, and drinks of warm fluids do good service. Previously warmed blankets are a great comfort as well as of benefit.

In the amputation of fingers and toes below the metacarpo- or tarso-phalangeal joints, rubber umbrella rings are used as tourniquets. The flaps are closely stitched, and, if there be any bleeding when the ring is taken off, a deep lateral stitch back of the line of incision on one or both sides will always effectually control it. We never put a ligature upon these arteries, finding the above method amply secure, and, as far as our last few hundred such amputations show, unattended with disadvantage.

In exarticulation at the metarcarpo- or tarso-phalangeal joints ligatures are applied if possible, but if the bleeding is obstinate, a deep stitch into the palm or sole can be made to control the appropriate vessel. These operations receive the usual house dressing and a palmar splint. They are, as a rule, not dressed for from ten days to two weeks, when solid and complete union is expected and usually found. Catgut sutures are passed through finger- and toe-nails without fear, if by so doing crushed or cut parts can better be brought into shape, and also in operations for ingrowing nails. We have saved many fingers, ears, and noses, which came in hanging by mere shreds of tissue, by promptly sewing them in place, and treating antiseptically. No opportunity has occured by which to test the saving of those parts when entirely severed from the body. Abrasions and brush burns are carefully cleansed and treated with either boracic acid ointment, or the standard house dressing The latter consists of: Protective; Lister gauze, wrung out of 1 : 1000 $Hg\text{-}Cl_2$ solution, and its skin surface thickly dusted with iodoform; a pad of dry 1 : 1000 cotton, and moist 1 : 1000 gauze bandages over all. We have found that Lister's boracic acid ointment makes up better if wax be substituted for the paraffine of his formula. Our receipt is: boracic acid and yellow wax, each 1 part, cosmoline 4 parts.

Ligatures are never applied except in the largest operative and accidental wounds. Sutures run under or through the bleeding points effectually control them. No trouble is experienced in tying catgut sutures or ligatures, when the first tie of the knot is made as for a surgeon's knot. Catgut is invariably used for these purposes. In treating some hundreds of scalp wounds, no matter how extensive, I have never applied a ligature, always finding that carefully placed satures will stop all hemorrhage. Stitches are placed very close together in all wounds; this presupposes proper drainage if it is necessary. If so, it is secured by a few strands of finest catgut, placed along the bottom, and brought out at one end of the wound. Small or superficial wounds as rarely require drainage as ligature. Scalp wounds are not drained unless extensive. If the edges are much contused or torn, they are excised. Quite small wounds of the scalp or elsewhere, and sometimes larger ones, are, after antiseptic closure, covered in with a minute pad of bichloride cotton, and plastered down with either pure collodion or combinations of it with such drugs as evaporated tincture of benzoin (evap. fl. ℥ ij. tr. benz. comp. to fl. ℥ij., and make to fl. ℥ ij., with collodion), iodoform (10 per cent.) salicylic acid, etc. Wounds too small for stitches are similarly treated. Large wounds, of course, receive the house dressing and possibly drainage.

Very tense hematomata are freely incised, the clot or fluid blood curetted out, any bleeding vessel stitched or tied if it can easily be found, and the whole sewn up with or without a drain, according to size, and dressed with some compression. Slowly resolving hematomata or those in which suppuration is present or incipent, are manipulated in exactly the same way.

Punctured wounds are laid open, curetted, washed with 1 : 1000 corrosive sublimate solution, and closed as above. If the bottom cannot be reached, a small drain should be carried as deep as possible, and the best hoped for.

Gunshot wounds are treated in much the same manner. If it can readily be done, the ball is extracted through the wound or by counter-opening. The entrance and exit (if there be one) wounds are excised, the track of the ball curetted thoroughly, a small gut drain carried all the way through, and the external wound treated as simple incised ones.

Compound fractures, if the skin wound is small, are freely cut into, washed with 1 : 1000, curetted, accurately stitched, and, if extensive, drained with catgut. Some of them are dressed more frequently than the actual wounds require in order that good position of the bones may be secured. Wounds of joints are treated in precisely the same manner, save that, unless they are dirty, we are satisfied with thorough washing with 1 : 1000, and omit the curette. Cure in one dressing is here attempted and good function expected.

Poisoned wounds are also treated somewhat similarly, but the utmost care is taken to get to the bottom of the wound itself and into all ramifications and sinuses with the curette and strong antiseptic solution (1: 500). If the wound is very bad and cellulitus present or threatening, continuous antiseptic irrigation (1: 2000) is started as soon as the cleaning out is effected. Large glass percolating jars, with glass stop-cocks, or other regulating device, suspended over the part give best satisfaction. Whilst thus employing irrigation any wounds should be well covered with protective, the whole part covered with lint, and the solution allowed to drip upon it. Suppurating wounds might be classed as poison wounds, for the treatment is almost the same, namely: curette and antiseptic solution (1: 1000 or 1: 500), excision of wound edges and, as usually, accurate approxima-

tion, with or without a drain as circumstances indicate. Punctured, gunshot, suppurating, poison, and compound bone and joint wounds when thus dealt with, as a rule heal by primary intention and under but one dressing.

Felons, buboes, simple and suppurating cysts, inflamed bursæ, and large, small, and diffused eradicable abscesses are treated by exactly the same method and usually with like results. Ineradicable abscesses, such as the psoas, are treated by this method as far as it can be made to go, and are then drained into an antiseptic dressing by means of a rubber drainage tube; through which they are from time to time washed out with antiseptic solution. Care must be taken in so doing, however, whether it be these or other cavities, not to let any of the solution remain in. It should be displaced by a weaker solution or distilled water. It cutting into abscesses, old hematomata, etc., a better result is secured by opening them from one side through sound tissue. Simple cellulitis is treated like the complicated form as described above.

Burns, if small in area, or confined to an extremity, are treated by the regular antiseptic dressing. All easily removed, dead skin, etc., is taken away; the parts washed with 1: 1000 bichloride solution, or iodoform sprinkled on (in part for its analgesic effect), then protective in narrow strips, and the dressing and cotton. Anæsthesia may be required to do this properly. Extensive burns are covered in with boracic acid or oxide of zinc ointment, the surface of which is sprinkled with iodoform and, if there is much pain, smeared thinly with oleate of morphia. This dressing is covered in with cotton batting and a bandage or binder.

Just here it may be well to speak of sloughs, granulations, and skin-grafting, but what is said applies to all wounds as well as burns. Under the antiseptic dressing sloughs are very slowly thrown off. It is our custom to excise them as soon as they become demarked. If properly done this causes scarcely any pain or bleeding and places the wound days and perhaps weeks nearer closure. By picking up the edge of the slough with a pair of forceps, and cutting with knife or scissors through its readily apparent junction with healthy tissue, it is easily accomplished. By this same process I have successfully, and without pain or hemorrhage, amputated even fingers and toes which we had attempted to save. All forms of exuberant granulations are usually shaved of with a sharp knife. The moist bichloride dressing, applied without the intervention of protective, is found to produce ample stimulation, if such is indicated. If skin grafting becomes necessary, a patch of thin skin is selected and made aseptic, as is also the granulating surface, if it is not so already. Almost microscopic pieces of the cleansed skin are then cut out by means of a purified needle and a pair of scissors, and planted among the granulations. Narrow strips of protective are applied, and upon this is passed either the "house dressing," or simply a pad of dry 1: 1000 cotton. Any bichloride solution remaining about the parts should be washed of with distilled water before the grafts are cut and set, and strong solutions should not be used while the islets of epithelium are forming.

Leg ulcers, when small, are stimulated, if necessary, by scoring with a sharp knife, nitrate of silver stick, etc.; dusted with iodoform; accurately fitted with a piece of protective, and gauze dressing put on with a firm roller. If they are large, and have callous edges, these latter are trimed off, the sore curetted, perhaps straps applied after the iodoform and protective, and then the same dressing. By this method they can always be kept perfectly sweet and clean; the discharge is but slight, and the pain still less. If the ulcers are very irritable, and will not bear the gauze dressing boracic acid ointment is substituted for it. Those painful, non-ulcerative conditions of the legs so often met with behave excellently under one or the other of the above dressings.

In such regions where it is impossible to apply or retain a regular dressing, great pains are taken in the cleansing before and after an operation, and iodoform in conjunction with frequent corrosive sublimate irrigations is freely used afterward. Especially are these applications valuable about the genito-urinary organs and rectum. In females after most operations thereabouts, the vagina is washed with 1: 1000, and then *filled* with iodoform. Beyond an occasional irrigation of the external parts, nothing more need be done until the stitches —if they have not been of catgut—are ready for removal.

Chancroids heal wonderfully if kept buried in iodoform; sometimes they are previously brushed over with acid nitrate of mercury, etc. No treatment is directed to hard chancres unless complicated.

Body parasites are destroyed with 1: 500 corrosive sublimate solution. No unpleasant effects have been known to follow even the freest use of the solution in this way. If the ear has been invaded, it is syringed with that solution, and then filled with oleate of morphia, and a little wad of cotton put on top.—*American Medical Digest.*

ELECTRICITY IN OBSTETRICS.

Dr. W. T. Baird, in the *Am. Jour. of Obstetrics*, concludes an article on the above subject by way of recapitulation, as follows:—

Apparatus.—Any good, reliable induction apparatus will answer, but it *must* be reliable and in perfect order, otherwise it will most likely fail at the very moment its services are most required. I

use one which was manufactured by Dr. Jerome Kidder for Dr. Heed and myself sixteen years ago, and it is still reliable, although having been in constant use during all that time. This is the one he calls "The Physician's Visiting Machine"; but when it is not convenient to carry one so bulky, I use a "Pocket Induction Apparatus," also manufactured by J. Kidder. This is very convenient, and gives all the current which could be required in any case. The only objection to it is that, if its use is required for longer than one hour, it will be necessary to re-charge it.

Electrodes.—I use one small copper plate, one and one-fourth inches wide and five inches long, one large surface sponge-electrode, and also one wrist electrode.

Application.—As soon as I deem it necessary to make the application, I do so in the following manner: The patient is placed in a dorsal position. I then attach one cord to the copper plate, and covering it well with a napkin wet with *warm water*, apply it to the sacro lumbar region. The other cord I attach to the wrist electrode. I now set the machine in action and attach both the cords to it,* the one connected with the plate to the positive pole. Then slide it under the bed or couch, where it and the cords will remain out of the way of the necessary attendants. The wrist electrode I now attach to one of my wrists (first covering the wrist with a napkin wet with warm water), then close the circuit by applying the hand (well moistened with warm water) of that wrist to the abdominal parietes.† By this means I am able to determine the exact condition of the uterus, and to note correctly all the changes which may occur in its contour, and I can also estimate the amount of increase which occurs in its contractions, and I am also enabled to perform uterine manual pressure, and if it is necessary to use both hands for this purpose, it can readily be done, and each hand then conveys the current to and from the uterine walls. When the application is made in this way, it enables the operator to estimate correctly the strength of the current which he is applying, and the hands being much more sensitive to the current than the abdominal walls, as long as he continues the operation through his hand, there will not be the slightest danger of his producing any unpleasant effects upon his patient, but on the contrary, a current as strong as can be borne ordinarily by the operator's hand will have a pleasant and soothing effect upon her. If an operator were timid, or could not bear a current of sufficient strength through his hand to be effective, he could then use a large surface sponge electrode in place of his hand, but if he does this, he should first test the strength of the current with his hand before applying it, in order to be very certain that it was not too strong at the commencement, as otherwise he might induce painful spasmodic contractions of the abdominal muscles, which would be most likely to cause a hasty suspension of the experiment. It is always best to begin with very mild currents, and gradually to increase them to the desired strength. I always make the application with the hand *continuous* until a sufficient amount of sedation is produced (from five to thirty minute), then I open the circuit by removing my hand, during the interval between the pains, and close it again when the pain recurs. In short, after all reflex pain has been subdued, and the patient rests well in the intervals, I then *only keep the circuit closed during the time occupied by the rhythmical contractions of the uterus.* By this intermittent application, we are effectually guarded against the danger of destroying the electro-muscular contractility of the muscles which we wish to stimulate and strengthen, and in my opinion it was owing to a neglect of this precaution which led to the results spoken of by Dr. Kilner when he said: "The current sometimes failed to produce contractions when most needed. After its use for an hour or one and a half hours, its sedative effects were manifest, but it no longer increased the uterine contractions." Now, it is evident to me that, if he had used it for an hour or an hour and a half continuously, he had produced a condition of paralysis or destroyed the electro-muscular contractility of the muscular fibres of the uterus, and therefore the current was powerless to longer increase the uterine contractions.

Beard and Rockwell say: "Experience shows that the effect of electrization, *if not too long continued*, is to give tone to the muscles," (Italics mine).

I have used it in this manner, in tedious labor, for twenty-four hours; and during all this time it furnished to the nerves and muscles all the elements of increased *strength and rest*, as was fully evinced by the ability of the patient to withstand her pains, and by her earnest desire, often reiterated, "not to allow her to have a pain without closing the circuit." Whenever it becomes necessary for me to support the perineum (and often sooner, if I need rest), I instruct a nurse or friend how to make the applications, to open and close the circuit, being careful to direct her that with each recurring pain to change the location of the electrode, so that *all* the muscles engaged may be brought *directly* under the influence of the current. As soon as I wish to facilitate the labor (at the beginning of the second stage), I use a current of as much force as the patient can bear with comfort, and in practice it will be found that the stronger the current used in this stage (short of

* The wrist electrode may be dispensed with by taking any common electrode in one hand, and applying the other hand to the abdomen of the patient, allowing the current to pass through both arms of the operator.

† Using 1st and 2d coil (B D current) of the apparatus.

producing spasmodic contractions of the abdominal muscles) the better it will suit the feelings of the patient. After the perineum is well dilated, I moderate the force of the current, and in cases where I have any reason to apprehend danger to the integrity of this structure, I withhold it entirely for a few minutes prior to the escape of the fœtal head from the vulva, so as not to hasten unduly the labor at this stage, and to give ample time for its full, free and safe dilatation. As soon however as the head escapes, I direct the circuit to be closed *most* of the time until after the completion of the third stage of the labor, which in nearly all cases occurs with but little or no assistance in a very few minutes. In all of my cases in which I have used it, the placenta has been expelled in from one to ten minutes from the birth of the child, with very slight or no traction upon the cord. This I regard as more simple, far less painful, and fully as speedy and efficient as Prof. Credè's method.

INJECTION OF ETHER AND IODOFORM INTO COLD ABSCESSES.

The use of iodoform has been of such marked advantage in the treatment of wounds that it is not surprising to find its employment extended to the treatment of lesions beneath the surface, such as cold abscesses Of the vehicles which have been used, glycerine has certain disadvantages, on account of its density and the difficulty of bringing it into intimate contact with the whole of the abscess wall. Ether has the great advantage of being an admirable solvent, and so fluid that it can penetrate where glycerine cannot. Besides this, it is believed that its vaporization by the heat of the body causes a further penetration and serves to convey the iodoform into the deepest recesses and most intricate sinues.

The injection of iodoform dissolved in ether into cold abscesses was first brought prominently to the notice of surgeons by Verneuil, at the Congress of French Surgeons in 1885, and since then it has been used to a considerable extent, in France especially. Recently Verchere, in the *Révue de Chirurgie*, has called attention again to its advatages, and given an account of its use in twenty-three cases, including abscesses connected with disease of the bones of the thorax, pelvis, and spinal column, of the humerus, of the femur, of the elbow, and of the carpal bones, and abscesses in the neck, and in the temporal fossa. In all of these cases, except one, the treatment was followed by prompt improvement, and by more or less complete recovery. In one case death followed from causes unconnected with the treatment, and this furnished an opportunity to demonstrate how thoroughly the iodoform had been deposited upon the entire wall of the abscess.

It appears from the reports of Verchère that this method is of special value in the treatment of tubercular abscesses. The iodoform seems to have a specific action upon tubercular deposits, and may act constitutionally as well as locally, since there is abundant evidence that it is absorbed when injected into an abscess, and its internal administration appears to be beneficial in general tuberculosis.

The method of Verneuil consists in evacuating the whole or a part of the contents of an abscess by means of an aspirator—or of a hypodermatic syringe, if the abscess be very small—and in injecting through the same tube a suitable quantity of iodoform-ether. Two dangers accompany these injections: 1. That of too great distention from the expansion of the vaporized ether. 2. That of iodoform poisoning. Verchère saw a case in which the distention of an abscess in the front of the neck was so great that symptoms of suffocation, from compression of the trachea, appeared, and another in which the whole of the scalp was raised from the bone. In both of these cases prompt relief was afforded by introducing needles of hypodermatic syringes, which permitted the escape of the ether vapor. The danger of iodoform poisoning is to be avoided by using only moderate quantities of iodoform. Verchère considers a drachm to be the maximum quantity which can be used with safety. In large abscesses about one and a half fluid-ounces of a five per cent. solution may be injected; in small abscesses a ten per cent. solution, or even a saturated solution may be used. In the case of very small abscesses with thick contents, Verchère employs the following ingenious method. He introduces the needle of a hypodermatic syringe into one part the abscess and leaves it in place, while at another point he evacuates the abscess through an aspirator and closes the aperture with collodion and gauze; when this is done, he injects the ether through the hypodermatic needle.

It is important, where it is possible, to prevent the escape of the ether vapor after the injection, and this is accomplished by closing the opening with collodion and gauze, as stated above. As the iodoform remains a long time in an abscess cavity before it is wholly absorbed, the injections should be repeated, if necessary, only after a considerable interval; Verchère advises once a month in cases of large abscesses in which the skin does not give way, until a cure is effected. This may require six or more months. When the skin does give way after the injection, the sac is eliminated as a sort of slough, and the cure is more rapid. The observation of this fact leads Verchère to suggest opening the sac as part of the treatment.—*Med. News.*

In England two doctors die for every clergyman.

THE TREATMENT OF RHEUMATIC FEVER.

The Medical News has presented its readers with brief reports on the methods employed in the treatment of rheumatism in the chief hospitals of Philadelphia, New York, and Boston.

For a knowledge of the natural history of rheumatic fever uninfluenced by drugs we are indebted to the late Dr. Flint, who treated thirteen patients in Bellevue Hospital with infusion of quassia, and to Dr. Sutton, of London, who treated a large number of cases with mint water. The observations of the latter physician, in conjunction with Sir William Gull, deserve a more thoughtful consideration than has been afforded them by many clinicians, as they are of primary importance in enabling us to judge of the effect of medicine on the disease.

Since the introduction of salicylic acid in 1875, this remedy and its compounds have been universally employed in rheumatism, and about sufficient time has now elapsed to permit us to arrive at a safe judgment of its uses. On looking over the reports, we find that in some form or other it is still employed in every one of the hospitals represented, and we ask for no better guarantee of its merit than this one fact. As a rule, a decade plays sad havoc with a drug announced with the *éclat* which attended the introduction of salicylic acid, but the experience of many physicians the world over seems to have accorded it a safe place in the therapeutics of rheumatism. The early anticipations, however, that we had in it a specific have not been realized, and too rapid cures have been expected. The elaborate analysis by Palmer Howard in Pepper's *System of Medicine*, vol. ii., seems to indicate very surely that cases treated by this method do not get better any quicker than on the old alkaline plan; indeed, if statistics are worth anything, they show that the cases do not get well so soon. Cardiac complications are probably more frequent, though in the reports we have published Dr. Loomis alone suggests that the effects of the acid favor their occurrence. It is a very general opinion, olso, that under the salicylate treatment relapses are more frequent. Unquestionably the most striking action of the drug is in the relief of the pain and the reduction of the temperature, so that the extreme suffering and the general misery of the patient are promptly relieved. Upon these manifestations of the disease it often acts "like a charm," and possibly relapses are in many cases brought on by careless exposure or errors in diet in patients whose acute symptoms have been removed while the *materies morbi*—whatever that may be—still remains in the system. A combination of the salicylates and alkalies has probably a more decided effect upon the disease than either remedy alone. Dr. Kinnicutt, as shown by the report from St. Luke's Hospital, New York, continues to have good results from the use of oil of wintergreen. which seems to act almost as promptly as salicylic acid, of which it is a methyl ether.

That rheumatic fever is essentially a self-limited disease, and is not materially influenced in its *duration* by drugs, is an opinion fully justified by a comparison of the reports of Sutton with those of the various writers who have published the results of the alkaline and salicylate plans of treatment. We have been too ready to mistake the relief of symptoms for the cure of the disease.

The reports do not refer very fully to the use of antipyrin in this disease, which is spoken of by recent German writers as a specific. It would seem, like the salicylates, to reduce the fever and to relieve the pain, and so far it may be specific, but we require further evidence to show that it really limits the course of the malady. Frankel, in *Deutsche medicinische Wochenschrift*, Nos. 43 and 44, speaks very highly of its value in thirty-four cases, but acknowledges that in certain cases it cannot replace the salicylates.

HOW TO TREAT HÆMORRHOIDS BY INJECTIONS OF CARBOLIC ACID.

Dr. Charles B. Kelsey, of New York, thus sums up his method of treating hæmorrhoids:

1. Use only the purest crystalized carbolic acid, the purest glycerine, and distilled water in the preparation of solutions. The glycerine is added to the solution of carbolic acid in water in just sufficient quantity to make a clear fluid, and the amount is not important. As soon as a solution begins to assume a yellowish tint it should be replaced by a fresh one. 2. Use only the finest and most perfect hypodermic needles and a perfectly-working, clean syringe with side handles. After each injection when the syringe is put away, clean it thoroughly to be ready for the next time. 3. The treatment may be applied to every variety of internal hæmorrhoids, no matter what their size. It is not applicable to external hæmorrhoids, either of the cutaneous or vascular variety, both of which may be treated by better means. 4. Before making an application give enema of hot water, and let the patient strain the tumors as much into view as possible. Then select the largest and deposit five drops of the solution as near the centre of the tumor as possible, taking care not go too deep so as to perforate the wall of the rectum and inject the surrounding cellular tissue. The needle should be entered at the most prominent point of the tumor. If the hæmorrhoid does not protrude from the anus, a tenaculum may be used to draw it into view After the injection has been made the parts should be replaced, and the patient kept under

observation for a few minutes to see that there is no unusual pain. The injection will cause some immediate smarting if it is made near the verge of of the anus ; if made above the external sphincter, the patient may not feel the puncture or the injection for several minutes, when a sense of pressure and smarting will be appreciated. In some cases, no pain will be felt for half an hour, but then there will be considerable soreness, subsiding after a few hours. If it increases, instead of disappearing, and on the following day there is considerable suffering, which may not perhaps be sufficient to keep the patient on his back but is still enough to make him decidedly uncomfortable, it is a pretty good indication that a slough is about to form. For the reason that it is impossible to tell absolutely what the effect of an injection is to be until at least twenty-four hours have passed, it is better to make but one at a visit and to wait till the full effect of each one is seen before making another. If on the second day there is no pain or soreness, another tumor may be attacked, and this will often be the case. 5. The strength of the solution must be regulated by the nature of the case, and in my own practice varies from five per cent. to pure crystalized acid. In a large, vascular, prolapsing tumor, which is well defined and somewhat pedunculated, five drops of pure acid may be used with the expectation of producing a circumscribed slough which will result in a radical cure. A thirty-three per cent. solution under the same conditions will probably produce consolidation and shrinkage without a slough, but the injections will have to be repeated several times. A small tumor which protrudes but slightly, is not pedunculated, and can be seen and felt as a mere prominence on the mucus membrane, may be cured by a single injection of a five per cent. solution, which will cause it to become hard and decidedly reduce its size, while an injection of a fifty per cent. solution might make considerable trouble, the remedy being too powerful for the disease. Guided by this principle, some experience will soon determine the choice of the solution. There is no arbitrary rule which can be applied to every case. As in any other surgical operation, some will be more satisfactory than others, and an occasional accident must be expected ; but, on the whole, it seems to be the best method of treatment yet devised.—*N. Y. Medical Times.*

DISCUSSION ON TRANSIENT ELEVATIONS OF TEMPERATURE AFTER DELIVERY.

Dr. Hanks opened the discussion. He considered it very difficult to tell, within the first twelve hours after delivery, whether a rise of temperature was due to septic or malarial influence. If, on careful examination of the genital tract, he found a laceration of the cervix or perineum, or an œdematous state of the vagina around the cervix, he was inclined to attribute the rise of temperature to the absorption of septic matter. In case the uterus was large, and the lochia fetid, he resorted to the douche.

Dr. Rodenstein stated that a chill coming on suddenly and followed by sweating was apt to mean malaria. A strong point in differential diagnosis he considered to be the state of the external os. In sepsis, he had noticed that the os was always patent ; in malaria, usually closed.

Dr. Patridge stated that the pelvic organs should be carefully and thoroughly examined, not alone once, but repeatedly, for frequently the second or third examination would reveal a cause not appreciable on the first. If, finally, he could find no cause for sepsis, he then concluded he was dealing with malaria. When we remembered how much constitutional disturbance might result from a simple abrasion on the surgeon's finger, it was amply evident how a slight lesion of the cervix, for instance, might be overlooked, and yet be at the bottom of septic infection.

Dr. Murray had never seen a case in which careful examination would not reveal some cause for the elevation of temperature, aside from malaria. He pleaded for careful examination of the genitals, both external and internal, and recalled the fact that a patient might have a large plastic exudation without much febrile disturbance, and yet this be entirely overlooked if a vaginal examination was not made. He had noticed the fact that in every case of sepsis the external os was patent, but he believed that the prime differential point between malaria and sepsis lay in the fact that in the latter there was never complete remission in the temperature, and that generally there were two exacerbations daily. The constitutional depression also was greater in sepsis than in malaria.

Dr. Mundé stated that it was his habit to assume rise of temperature after delivery as probably due to septic absorption. Patency of the external os to him signified something within the uterus—remnant of placenta, or decomposed clot. He had recently seen a case in a pronounced malarial neighborhood, where the patient's temperature was 104°, the pulse 130, the facies bad, the lochia very offensive, the uterus large, the os admitting three fingers. With his long curette he had removed a mass of offensive blood clot at the placental site, washed out the uterus, and given antipyrine and applied the ice-coil. The temperature was lowered, but for three days there had since occurred chills and rise in temperature which he was now inclined to believe were due to malaria. Malaria, he was well aware, was a hobby with some gentlemen, as was evident in a

case he had recorded a few years ago, where one of his consultants clung to the diagnosis of malaria in the face of a metastatic abscess on the wrist. This case he had considered pure septic pyæmia. He was convinced that peri-uterine exudations were often overlooked, for the simple reason that careful vaginal examinations were not resorted to. These were, of course, the very cases where intra-uterine irrigations would be productive of harm instead of good.—*Am. Jour. of Obstetrics.*

THE MANAGEMENT OF PLACENTA PRÆVIA.—1. In any case, avoid the application of all chemical styptics, which only clog the vagina with inert coagula, and do not prevent hemorrhage. At the very first, the patient should be put in a state of absolute rest, body and mind, and a mild opiate is often desirable at this stage, to quiet irritation.

2. Inasmuch as the dangers from hemorrhage are greater than all else, to both mother and child, at the earliest moment preparations should be made to induce premature labor, and labor being once started, the case should be closely watched to its termination by the accoucheur.

3. In primiparæ and mothers with rigid tissues, the vagina should be well distended, by either the colpeurynter or tampon, as an adjuvant to the cervical dilatation.

3. In the majority of cases, and in all cases, especially where there is reason to believe that rapid delivery may be required, it is more safe to rely on the thorough, continuous, hydraulic pressure of a Barnes' dilator than on pressure on the fœtal parts.

5. Where the implantation is only lateral or partial, and where there is no object in hurrying the labor, bipolar version, drawing down a foot and leaving one thigh to occlude and dilate the os, may be practiced, according to the method of Braxton Hicks, except in cases where the head presents well at the os, when,

6. The membranes should be ruptured, the waters evacuated, and the head encouraged to engage in the cervico-vaginal canal.

7. In the majority of cases, podalic version is to be preferred to the application of the forceps within the os.

8. In some cases, in the absence of assistance or the necessary instruments, the complete vaginal tampon, in part or wholly of cotton, may be applied and left *in situ* until (within a reasonable time) it is dislodged by the uterine contractions and the voluntary efforts of the mother. In cases of favorable presentation—occiput or breech—the tampon will not materially obstruct the descent of the child, and in some cases the tampon, placenta and child will be expelled rapidly and safely without artificial assistance.

9. The dangers of septic infection by means of the tampon or india-rubber dilators are so slight, if properly used, as not to be considered as seriously impairing their great value.

10. Whenever it is possible, dilatation and delivery ought to be deliberately accomplished, in order to avoid maternal lacerations.

Finally. As cases of placenta prævia offer special dangers from post-partum hemorrhages, septicæmia, etc., the greatest care must be exercised in every detail of operation and nursing to avoid conveying septic material to the system of the mother. M. McLean in *Am. Jour. Obstetrics.*

BICHLORIDE OF MERCURY IN UTERINE CATARRH.—I have been using a solution of bichloride of mercury as an application to the cervical canal and uterine cavity in cases of chronic mucopurulent discharge. Originally it was suggested to my mind by some considerable success with the same agent in gonorrhœa, as recently recommended. The suspected relation between many chronic inflammatory conditions of the female genital organs and gonorrhœa still further suggested the use of the bichloride, though in much stronger solution. One-half to one grain to the ounce of water was the strength I employed, and, on trying it, my success was so much better than ever before that I have continued to use it in all possible cases of the kind. It has several manifest advantages. Applied with the cotton-wrapped applicator, it excites no immediate uterine contraction, as iodine, carbolic acid, and other agents generally do. This enables one to make two, three or more applications in rapid succession, and affords a much better chance for reaching the entire endometrium. It leaves behind it no coagulated mucus, or film of chemically-altered epithelium, as carbolic acid and nitrate of silver do, to be detached and expelled subsequently by a process almost necessarily involving fresh supuration A similar solution may, as a final measure, be applied to the whole vaginal membrane as the speculum is withdrawn, and irrigation with hot water or a very weak solution of bichloride continued for some days. In obstinate catarrh of the cervix, with almost endless ropy secretion, I have also had good success, while I do not remember, after many trials, any success worth mentioning with any agent employed previously. In nearly all the cases two or three applications entirely checked discharges of long standing. Sometimes they recurred at the monthlies, but were again checked for good apparently by another application. In two cases single applications did the work, and out of the twenty-three cases treated solely in this way, two only resisted treatment, and were complete failures.—*Dr. Watson, Therapeutic Gazette.*

AVIAN TUBERCULOSIS.—The study of comparative pathology will, it may be hoped, ere long at-

tain to the proportions that its importance as an aid to the understanding of disease demands; and although we have not hitherto derived such assistance in medicine as its thorough prosecution would render possible, there is, notwithstanding, some trustworthy evidence forthcoming to show that this reproach in the past will cease to have weight in the future. For one thing, it may be urged in defense of our present ignorance on the subject, that the conditions necessary to successful study of disease in animals have, in effect, to be made, and that whoever would enter on it with any satisfactory prospect of advantage therefrom, must first, of necessity, take steps for acquainting himself with details, zoological and morphological, which can only be acquired by a special and prolonged education. Fortunately, however, there are not wanting in this age spirits able and willing to undertake the huge task that such a devotion implies; and among the band of workers in this field of investigation, Mr. John Bland Sutton, F. R. C. S., has already made considerable advances in this country. We have already been able to publish in these columns some of the results of Mr. Sutton's observations; and we have now to draw attention to a very valuable essay contributed by him to our American contemporary the *Journal of Comparative Medicine and Surgery*, on the subject of tuberculosis in birds. The observations embodied in this paper extended over a series of years, and were principally carried out in the gardens of the Zoological Society of London, where the author has long enjoyed the privilege of making *post mortem* examination of the animals dying in confinement there. Mr. Sutton points out that one of the earliest conclusions to which he was driven, is that disease in animals observes a zoological distribution, and that as regards tuberculosis, the class almost peculiarly affected is that of which the food consists of grains, fruits and vegetables. It occasionally, however, is met with in birds of prey; but in this connection it is interesting and important to learn that it is conveyed to them from infected graminivorous or frugivorous birds forming part of their food. Other examples also are given of animals contracting the disease from their ingesta, and the suggestiveness of the conclusion thus arrived at will not fail to commend itself to medical men; nor can we fail to reflect on the significance of the fact, demonstrated now for the first time by Mr. Sutton, that grain-eating birds are in an enormous majority among those in which tuberculosis is developed; and from this to the danger of infection from such infected material the mind very readily passes. The paper to which have alluded describes in careful detail the morbid anatomy and etiology of the tuberculous process in birds, and contains a vast amount of material of the highest interest to professional readers; and we heartily welcome it as a noteworthy addition to the labors already so efficiently carried out in a neglected field of study by an exact and painstaking investigator.—*Medical Press.*

MEDICAL NOTES.

To disguise the odor of *iodoform*, the best agent is thymol.

It has been recently asserted that massive doses of iodide of potassium will cure *gonorrhœa.*

Dr. Longstreth affords patients suffering with *stomatitis* much relief by the local application of cocaine.

Nine or ten inches below the tubercle of the tibia is the place to amputate in order to get the *best stump* for the application of an artificial leg. (Prof. Brinton).

It may not be widely known that an extemporaneous liquor ammonii acetatis may be produced by simply dissolving the carbonate of ammonia in pure vinegar.

For the cough of *phthisis*:—

℞—Terebene,
Creasoti, ... āā f ʒij.—M.

SIG.—Inhale fifteen or twenty drops from a hot sponge several times daily.

Do not let patient with *phlegmasia alba dolens* be moved before four weeks after the beginning of the disease. Use a bandage when patient begins to sit up. (Prof. Parvin).

In incipient *fatty degeneration of the heart*, and myocarditis, a combination of exceeding value is iron with nitro-glycerine. (Prof. Bartholow).

In *angina pectoris* the centesimal solution of nitro-glycerine seems to be mostly used with good results at the Jefferson College Hospital.

Next to ergot as a remedial agent to restrain *hemorrhage*, Prof. Parvin places hydrastis canadensis, gtt. xv-xx ter die. He has never seen any good derived from gossypium.

In the treatment of *gout* and those with a gouty constitution, Prof. Bartholow states that sulphate of manganese is a remedy of great utility, its virtue being chiefly due to its effect on the hepatic functions.

Prof. Parvin recently gave the following formula for *amenorrhœa* with anæmia, which he has used for many years, and in certain cases derived very satisfactory results:—

℞—Terebinthinæ albæ,
Pulv. aloes,
Ferri sulph. exsic., ... āā gr. j.
Ft. pil.

SIG.—Ter die.

In *alcoholic nervousness* or hallucinations, Prof. Da Costa prescribed gtt. xv of the fluid extract of erythroxylon, ter die, and to increase to tolerance. Also—

℞—Sodii bromidi, ... gr. xv
Chloral, ... gr. x
Syrup,
Aquæ, ... āā q.s. ad f ℥j.—M.

Sig.—As required.

For *exophthalmic goitre* in a robust and plethoric subject, Prof. Da Costa prescribed :—

℞—Tinct. aconit. rad., ... f ℥j.
Tinct. zingiberis, ... f ℥ij.
Syr. simplicis, ... f ℥j.—M.

Sig.—Ten drops three times daily, for months, to be gradually increased as the patient will bear it.

Terebene has been much prescribed of late, in various lung troubles, at the Hospital. The following is a prescription given by Prof. Da Costa for *acute bronchitis* :—

℞—Terebene, ... f ℥ij.
Mucilag. acaciæ, ... f ℥ij.
Morphinæ sulph., ... gr. ½
Syrup tolu, ... f ℥j. —M.

Sig.—A teaspoonful every third hour.

THE DURATION OF INFECTIOUSNESS IN SCARLATINA, SMALL-POX, MEASLES, MUMPS, AND DIPHTHERIA.—There is one point I wish to raise in this discussion. We must distinguish infection from the person and that from clothes. We must know for how long infection is exhaled from the patient as well as the potency and duration of infection attaching to the cast-off *débris* of pathological processes induced by the disease. A case may be said to be first infectious and later contagious.

Infection is exhaled for a much shorter time probably than we have generally imagined. The question to determine is, for how long the pathological processes induced by the different diseases —for example, the desquamation of scarlet fever and the catarrh of measles—continue the carriers of the contagion. How long will the discharge from skin and mucous membrane bear infective properties ?

I have reason to believe that personal infection, or exhaled infection, in contradistinction to infection by contact or inoculation of the disease products, has a definite duration, and that a special period of duration of this exhaled infection characterises each disease. On the other hand, many things are explained to hasten or hinder the elimination of infection with the characteristic discharges of the disease. The rules given, that scarlet fever is infectious as long as desquamation lasts, small-pox as long as every scab or scale remains on the skin, diphtheria while sore-throat, or albuminura, or discharges from mucous surface continues, are all open to question. Upon this hypothesis, we could never say when a person ceases to be infectious.

I would suggest that infection only attaches to those cast-off products of the disease when they were formed during its strictly infectious period ; that, for example, the early desquamation of scarlet fever, and not the second or third peeling, is infectious ; the primary albuminuria of diphtheria as well as scarlet fever, but not that which may remain for weeks or months or years afterwards. I hold that these pathological conditions and their products, induced in a characteristic way for each disease, are not any guides as to the continued infectiousness of a patient, and on this basis I would urge that a mild case is as long infectious as a severe one.

My observations make the duration of infection in the several diseases as follows : Measles, from the second day, for exactly three weeks. Small-pox, from the first day, under one month, probably three weeks. Scarlet fever, at about the fourth day, for six or seven weeks. Mumps, under three weeks. Diphtheria, under three weeks.—*Dr. Pearse in Br. Med. Jour.*

ADVICE TO YOUNG DOCTORS.—Dr. Robert Batty, in a recent address before the Atlanta Society of Medicine, thus spoke of the younger members of the profession : If you want to succeed in professional life, don't be too careful when a call comes to you to inquire into the circumstances of your patient, whether he is able to pay a good fee or not. Don't be too careful to prune closely at the outset and trim your practice into influential patients only, and all that sort of thing. Try to infuse within your own heart and soul a true spirit of benevolence, love of your kind, zeal in your profession, anxiety to relieve human suffering, and if you pursue your mission with your whole heart, with true earnestness of purpose, *somebody* will find it out, and it will not be a great while before a great many people will find it out, and they are not going to let you starve. That sort of men is too scarce to let starve They don't starve in America. They can't be spared. If you want to be sure of your bread and meat and provender for your horse and something for the blacksmith and carriage man, take that recipe and try it awhile. I think I can say confidently, gentlemen, from the very first day that I practised medicine it has been a rule with me to give no thought for the morrow, what I should eat, wherewith I should be clothed. Consult the interests of your patients. Try and get them well in the shortest possible time and somebody will clothe and feed you and you will have an established practice and an established reputation. You will have the support and con-

fidence of the community in which you live.—*Practice.*

HYSTERIA IN A NEW LIGHT.—According to *The Lancet*, September 4, 1886, the views of Mr. de Berdt Hovell on the subject of hysteria are to be carefully received as those of a shrewd practitioner of long practice and large experience. He strongly protests against the whole hypothesis of hysteria. He thinks the theory that localizes the disease in the uterus is the mere survival of medical demonology, which located ill humor in the spleen, blue-devils in the liver, and the soul in the pineal gland. He claims for hysterical patients more fairness of treatment and more discrimination. He atributes many of the cases to shocks, physical or moral, leading to deficient or depressed nerve-power, with all that this implies in the way of pain, irritibility, inability for locomotion, etc. Mr. Hovell admits that the cases are difficult to cure; but he maintains that if we are to deal with them effectually we must "set aside all consideration of the organs of reproduction, which most probably are not concerned, and transfer our attention to the moral nature." Mr. Hovell gives several cases in which there was a distinct history of shock or exhaustive work, to explain the breakdown in the nervous system. We live in days when the nervous system is getting its full share of attention from pathologists and physicians, and when even gynecologists are finding out that the uterus, and even its appendages, which are now blamed by some for everything, are not such culprits as has been supposed. Mr. Hovell will admit that the cases of so-called hysteria do occur chiefly, though by no means exclusively, in women. In their organization there is *something* specially favoring the occurrence of this state or disease. It may not be in the special organs of the female so much as in the special organization of the nervous system. Mr. Hovell deserves credit for insisting on this point, and he may well be satisfied to know that the drift of opinion among physicians is towards the acceptance of his views. Women are more finely strung than men. They are more liable to pain or pains of all sorts from mere functional causes. Such a constitution is perplexing to the physician, but it has to be considered, and not treated as a sort of crime, as has too often been the case.—*Medical Record.*

THE TRANSMISSION OF MEASLES FROM PLACE TO PLACE BY HEALTHY PERSONS.—The possibilities of carrying the contagious principle of measles from place to place by the medium of the bodies of healthy persons was recently discussed by the Medical Society of Berlin, and one gentlemen, Mr. Joel, of Lausanne, presented certain facts which lead to the belief that such a possibility does exist, and that the medium is often furnished by physicians themselves. One case which was cited was that of a boy who was brought from Geneva to Lausanne while he was passing through the incubation state of measles. The butcher and the postman who served the institution to which the boy was brought conveyed the disease to their children, who were attacked with it in a short space of time, and, what is quite remarkable, the children in almost every house to which the postman delivered letters were attacked. A little girl was brought to a hospital, and in a few days had undoubted symptoms of measles. Her father had paid her several visits before the measles appeared, and it was ascertained that two of his children were suffering at home with the disease. Eight other children in the hospital were quickly seized with it. It is thought the physicians cannot always avoid carrying the contagium with them, even when extraordinary care is taken. Prophylactic means on the part of the physician should be as thorough as possible, however, by disinfection, change of garments, and all other available procedures.—*The Archives of Pedriatrics.*

INTUBATION OF THE LARYNX.—Dr. Northrup, Pathologist to the New York Foundling Asylum, thus concludes a paper in the *Medical Record* on Laryngeal Dyphtheria and Intubation: Briefly, the advantages and disadvantages are estimated as follows, in order of importance: Intubation relieves dyspnœa due to laryngeal stenosis. There is no objection on the part of the parents and friends. The operation is comparatively simple, and free from danger and free from shock. No anæsthetic is needed, and no trained assistants. No fresh wound is added. The subsequent care of the case requires no trained attendant. The inspired air enters the lungs moist and warm. It does not preclude tracheotomy, and may be found useful as a guide upon which to cut.

Intubation has one conspicuous fault, attested by all. It embarrasses, and sometimes interferes with, the swallowing of fluids. The nourishment of the child is never more important. As a rule, however, the child learns to swallow fairly well, and many times has but slight embarrassment. There is likewise *one danger*, illustrated by one published case. It is the danger of pushing tenacious tracheal pseudo-membrane before the entering tube and blocking the trachea. I know of no death from this cause, but I believe it threatens every reinsertion of the tube after the pseudo-membrane has begun to soften, and is easily detached. The medical profession are called upon to relieve the urgent symptom of laryngeal dyphtheria—dyspnœa. For such relief tracheotomy has been offered. The question now before us is, what part of the field intubation is capable of covering, and what advantages, if any, it has over the cutting operation. First, let us question close-

ly whether it meets the requirements. Does it relieve laryngeal obstruction? Waxham, with 96 collected cases, says it does. O'Dwyer, with 48 cases, says yes. Hance, with 5 cases, says yes. Jennings, with 4 cases, admits that it does. Northrup, with 12 cases, says yes. One hundred and sixty-five cases, carefully reported and well attested, say it releaves laryngeal dyspnœa promptly and effectually. Now, does it leave the patient without any of the advantages offered by tracheotomy? For the answer to this question we must look to results. Twenty-eight and one-half per cent. have thus far recovered, and in estimating the usefulness of the oparation it must be remembered it is new, and while its advocates have been making these records they have at the same time been accumulating experience which will tell in future reports. Some of the accidents here mentioned are grotesque, and can never occur again. I do not mention tracheotomy records, because they are so variously estimated. Do you believe that if every case were collected the percentage of recoveries after tracheotomy would reach twenty-eight and one-half? If the number of cases is insufficient, we have not long to wait, for enterprising Chicago sends us the report of 96 cases. Intubation is in use in Kentucky, Indiana and Virginia.—*Gaillard's Med. Journal.*

Chloroform Vapor in Painful Ear Cases.—I would like to draw the attention of practitioners to the use of this vapor in ear cases, so that it may become better known and more frequently adopted, as at least a preliminary part of the treatment in cases in which intolerable pain is the chief complaint. I have very often used it with almost magical effects and very pleasing results in cases in which the pain in the ear was so great that the patient could not bear the parts to be touched even in the gentlest possible manner. In cases of furunculosis, and in diffuse inflammation of the external meatus, as well as in acute inflammation of the tympanitic membrane, I have found it to relieve the pain so much that the patients considered themselves cured. In some cases the pain was kept in abeyance so long that the necessary manipulations and treatment were carried out without the least inconvenience to the patient, and in many cases there was no return of the distressing symptoms.

Its application I have also found exceedingly useful (in fact a complete cure) in cases of otalgia, in which, on examination of the ear by means of the speculum and mirror, no apparent cause for the pain could be ascertained. Again, in cases of neuralgia, where the pain is shooting all round the ear, and seemed to originate from it, the relief was permanent, Also, in cases of earache arising from carious teeth, as well as in cases of toothache of the molars, without any pain in the ear, it has proved very beneficial.

It is a very simple matter to introduce the vapor into the ear, and the only thing to guard against is the introduction of the chloroform itself, which might irritate the part and perhaps cause unnecessary discomfort.—Robb, *Brit. Med. Jour.*

Abdominal Support during Pregnancy.—I always advise patients in a pregnant condition to leave off their corsets (from about the fourth month onward, should I see them at that time), and having supplied the want of a corset by a suitable bodice, to wear a supporting belt with elastic sides, so arranged as to exercise a comfortable pressure, from *below*, on the muscles, and fitted with tapes or straps to relax the pressure as the uterus enlarges. In every case in which I have recommended this to be done, and where my directions were followed, the patient not only expressed herself as feeling far more comfortable, but I have remarked that the subsequent labor was of much shorter duration than usual, owing, I believe, to the support afforded in time to the abdominal muscles, and which by husbanding their tone and strength, enabled them to assist the uterus, in its efforts of expulsion, in a marked degree.

When engaged to attend primiparæ, I also direct the bandage to be left off at night, and the abdomen well rubbed with lard at bedtime. When this treatment is followed in primiparæ, I find there is little or no trace of the "linea albicantia" to be discovered after the patient recovers from the lying-in, and the abdomen also resumes its natural appearance, which the patient as a rule is the first to remark.—Dr. Duke in *Provincial Med. Jour.*

A New "Cure for Cancer."—Dr. Velloso lays claim to having cured several cases of epithelioma of the face and lips with the juice of alvelos, a plant which belongs to the family of Euphorbiaceæ. It acted as an irritant, and destroyed the diseased tissue, which was quickly replaced by healthy granulations. Of the three different kinds of alvelos (male, female, and wild), the second is considered the most efficacious. It is found at Pernambuco, and although the natives have employed the juice for some time, it has not come into extensive use on account of the severe pain which it causes. The best results were obtained with the juice in a concentrated solid form, and with the addition of vaseline or lanoline. This preparation should be applied with a brush to the affected part (previously washed with a solution of carbolic acid), which should then be left exposed to the air for at least an hour. It should afterward be covered with lint. This treatment should, as a rule, be repeated every two or three days, and never more than once in twenty-four hours, as the pain of the application is severe. The treatment was more speedily successful when begun before ulceration had occurred.—*Brit. Med. Jour.*

Venereal Infection Pronounced a Crime.—Some consternation may be caused among a certain class by a recent judgment of Justice Wills of the Central Criminal Court, England. The charge against the prisoner was on two counts, one with having carnal knowledge of an imbecile woman, aged eighteen, and another, under 24 and 25 Vict., c. 100, s. 47, for a "fraudulent assault" upon the same woman, occasioning her actual bodily harm. The harm done was the wilful infection with syphilis. The prisoner was found guilty on both heads, and sentenced to two years' imprisonment for the first, and five years for the second. The most remarkable piece of information is that a man who has immoral sexual connection with a woman, knowing himself to be suffering at the time from gonorrhœa or syphilis, is liable to prosecution and penal servitude.—*Med. & Surg. Reporter.*

Wants to Study Medicne.—Dr. J. B. Kell, of Delphos, O., writes: "Dr. S——, of our city, received the following letter, from a Reverend of Putnam Co., O., who desires to 'sudy medson.' I give it in full.

"'H——, Putnam Co. O.

"'Dr. S——.

"'Dear Sir: aS I think of StuDing medson, and am Aqanted With you by rep and aS you bore the name of A Criston I thout you Would be a good man to Sudy under and ASK you if there Would Be Eney Chance to Have you fore councle I will fernish my oan books and Bord Ples ancer By retorn male and I will come up Yours in christ.

"'Rev. R—— P——.'"

—*Med. Record.*

A New Bacteriological Journal.—A new *Centralblatt*, devoted to the subject of bacteriology and animal parasites, will shortly appear in Germany under the editorship of Dr. Oscar Uhlworm, in Cassel. The extensive and rapidly increasing literature on these subjects, and the absence of any weekly journal devoted to this particular science, will render this venture acceptable to all who interest themselves in these matters. The contents of the journal will embrace references to recent work, historical essays and original papers. Dr. Uhlworm will be assisted by a numerous class of collaborators in the various European countries.—*Brit. Med. Jour.*

A coincidence showing a probable septic origin for pneumonia, is reported in the *Lancet*. On the 18th of October, a man and his wife were admitted into St. Thomas's Hospital, suffering from acute pneumonia of respectively three and four days' duration. Each was aged thirty-two years. The disease ran an acute course, being little influenced by treatment, and they died at the end of four days within a few hours of each other. At the post-mortem examinations which were made on the same day, acute inflammation of the right lung were found in each; this had attacked chiefly the base in the case of the man, and the apex in the woman. It would appear that they had left their house, and moved into lodgings only two or three days before the commencement of the disease on account of the bad smells, making it probable that the disease was of septic origin.—*Boston Med. & Surg. Jour.*

An English gentleman found a large turnip in his field of the shape of a man's head, and with the resemblance of the features of a man. Struck with curiosity, he had a cast made of it, and sent the cast to a phrenologist, stating that it was taken from the head of a celebrated professor, and requested an opinion thereon. After sitting in judgment it was reported that it denoted a man of acute mind and deep research, that he had the organ of quick perception, and also of perseverance, with another that indicated credulity. The opinion was transmitted to the owner of the cast, with a letter requesting, as a particular favor, that he would send them the head. To this he politely replied that he would willingly do so, but he was prevented, as he and his family had eaten it the day before with their mutton at dinner.

"LINES TO A TIMID LEECH."

Nay, start not from the banquet where the red wine foams for thee,
Though somewhat thick to perforate this *epidermis* be;
'Tis madness, when the bowl invites, to linger at the brink,
So haste thee, haste thee, timid one. Drink, pretty creature, drink!

I tell thee, if these azure veins could boast the regal wine
Of Tudors or Plantagenets, the draught should still be thine!
Though round the goblet's beaded brim plebeian bubbles wink,
'Twill cheer, and not inebriate. Drink, pretty creature, drink!

Perchance, reluctant being, I have placed thee wrong side up.
And the lips that I am chiding have been farthest from the cup.
I have waited long and vainly, and I cannot, cannot think
Thou wouldst spurn the oft-repeated call: Drink, pretty creature, drink!

While I watch'd thy patient struggles, and imagined thou wert coy,
'Twas thy tail and not thy features that refused the proffer'd joy.
I will but turn thee tenderly—nay, never, never shrink—
Now, once again the banquet calls: Drink, pretty creature, drink!

—*Chemist and Druggist.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet, Toronto."*

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, MARCH, 1887.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

STRICTURE OF THE URETHRA.

There is no subject in the domain of surgery of the urinary organs of greater importance than stricture of the urethra. The disease is a very common one, the treatment is much more complicated, and the prognosis is more grave than is ordinarily supposed. The victims of the disease are numerous and confined to no particular climate or locality. The poor sufferer is usually subjected to temporary treatment by local physicians. Year by year he grows worse until he is worn out by catheterization, bladder irritation, or other complications of kidney troubles, and at last falls a victim to a disease that on the onset seemed of little moment. A small urethral calibre would seem in itself of no consequence, and very little if any inconvenience, yet it is too often the warning note of a fatal termination. Every case of stricture, no matter how trivial in character, may be possibly grave in its results. Most physicians of ordinary experience can recall cases in which the stricture had been dilated and the patient discharged; in course of time it closed, the patient returned for treatment, with an almost impassable stricture, catarrh of the bladder and disease of the kidneys, and death ended the suffering. The profession is probably indebted to Sir Henry Thompson for more valuable suggestions regarding the careful and conservative treatment of stricture than any other surgeon who ever wrote upon the subject. He was among the first to point out the gravity of strictures of the urethra, and understanding this so well, he was also able to treat strictures more successfully than surgeons who were in the habit of looking upon mild cases lightly.

In the treatment of all strictures, the first important thing is to give the patient to understand all about the consequences of an old narrow stricture, enjoining him strictly to keep himself under the observation of a competent surgeon. Sir Henry Thompson suggests that simple stricture, the history of which is recent, requires nothing save gradually restoring the calibre of the canal to its normal size by means of flexible bougies; for this purpose he used the style of bougie called "Olivaire," which were followed in severe cases by polished steel dilators to be used for an indefinite time. By carefully looking after a urethra treated gently in this way, no further trouble may be anticipated. The patient can be trained to the proper use of the bougie, and should be instructed to follow its regular use for years. When there is a narrowing or stricture of the external meatus, congenital, organic, or acquired, dilatation will not relieve it. Such strictures should be freely cut. Sir Henry Thompson further says that strictures three and a half or four inches from the meatus are not often benefited by dilatation, and in old age the same is usually true, the tissues having become rigid. Dilatation may however be first attempted in such cases. In all cases, in which there is a decided tendency to contract, despite the dilatation, internal urethrotomy should be at once resorted to. Prompt action, says the above named author, will save much suffering, avert perineal abscesses, fistulæ, and organic changes in the bladder, ureters, and kidneys. To delay until symptoms of such troubles appear, involves complicity in a course which irretrievably damages the patient's life.

There is another condition incident to strictures of long standing requiring probably a different course of treatment; we refer to septicæmia. We have had patients under our care, who, when first seen by us, had almost complete obstruction to the passage of urine by reason of an old rigid stricture, through which the smallest guide could not be made to pass. These patients usually show well-marked symptoms of septicæmia; the strictures are usually extensive, and the bladder complications a prominent symptom. In cases of this char-

acter, any attempt at gradual dilataion or internal urethrotomy only tends to increase the constitutional disturbance, and renders the prognosis more unfavourable. The urgency for a speedy relief is so imperative that the only hope for the sufferer is in external perineal urethrotomy. By this operation we can at once get into the bladder, and thoroughly wash it out; thus the patient is placed in a condition of temporary comfort, compared with his former condition. After restoring his health in a measure, and all the alarming symptoms have disappeared, the surgeon may proceed with the necessary operation to enlarge the urethra.

It is not possible, in any operation for stricture, to promise immunity from its return, although the more completely the contracted tissues are divided the more likely we are to have a certain cure. As a rule, the stricture will return, when the same treatment should be resorted to. Surgeons can not be too particular in reminding the patient as an injunction to not delay long in having the returning stricture treated after it manifests itself. By so doing, the implication of vital organs is avoided, and the patient is permitted to live out an average life in comparative comfort.

TREATMENT OF ERYSIPELAS.

Erysipelas is a well known specific inflammatory disease of the skin. It has long been known to be more or less contagious, but latterly Koch and Fehleisen have succeeded in obtaining pure cultivations of the erysipelas cocci, in inoculating them upon nutrient gelatine, and from the latter setting up erysipelas upon the living individual by inoculation. Hence the fungus or microbe of this disease is clearly established. Consequently it is essentially necessary that there be a previous wound or abrasion of the cutis or mucosa, in order that the morbid germ may obtain a starting point. The door must be opened or it cannot obtain an entrance. The wound may be and often is so minute that it escapes notice, and therefore a previous lesion cannot always be demonstrated. The local and constitutional symptoms are so well known that any reference to them would be superfluous. We shall therefore confine ourselves to the treatment.

At one time bad fluids in the stomach and intestines were said to be the cause, and emetics and purgatives were freely administered with the object of removing them. The peccant humors of the blood were long charged with being the cause not only of erysipelas but of most other pathological conditions, and consequently phlebotomy was added to the purgatives and emetics, and a great variety of alleged blood-purifiers was administered. This mode of treatment failing to accomplish the object, or to be followed by success, the theory of poverty of the vital fluid, the lack of fibrin, was promulgated and accepted as the chief cause of this, and many other kindred diseases It was held that this was a simple inflammatory process, which spread, because there was not sufficient fibrin in the blood to form the necessary protective barrier. With this view, iron and quinine, with various other tonics, reconstructive remedies, abundant nourishment, and even stimulants were administered ad. lib,; while argent nit., tr. iodine, lead lotions, incisions, and even the cautery were locally applied, with the idea of assisting to establish the necessary barrier to its extension.

This treatment was doubtless much better than the former and produced incomparably better results. An innumerable number of other remedies have all along been advocated as specifics, based on no particular theory, but used empirically. Among the many, we will mention but two which prolonged their existence upon the principle of the survival of the fittest, viz., aconite and belladonna. Many prominent physicians have claimed good results from the latter remedies, and confidently advocated their use. Among these we may mention Liston, Fleming, Thompson, Trosseau, Phillips, Bartholow, and Köhler. Even at the present, opinion appears to be divided with regard to the merits of the two methods of treatment, although we believe the large majority have more confidence in the former or iron treatment.

But within the last ten years, more attention has been given to the removal of all foci from which infection might originate, pure air and disinfectants, in brief, to securing the most perfect hygienic environment possible. And now that it has been established through the persistent work of Hueter, that wherever there is erysipelas, cocci are found, and where there are no cocci, there is no erysipelas, antiseptic treatment must supersede

every other. But, unfortunately, it was found that applying antiseptics externally was insufficient to prevent its advance. Hueter found that only when a 2% solution of carbolic acid in water was injected, so that the whole erysipelatous area was undermined, was the disease conquered, and the multiplication of cocci stopped. But this method was too severe, although unfailing in its results, and many experiments have been tried with a view of accomplishing as good results with less suffering and cruelty. Kraske recently advocated scarifying the erysipelatous area, and applying carbolised compresses, but this would be no less painful than the former. Very recently, Professor Von Nussbaum, of Munich, claims to have absolutely arrested the erysipelas without pain and in an easy manner. When erysipelas attacks a wound, or sets up at any point, after proper disinfection and covering it with a gauze compress, Professor Von Nussbaum paints the whole erysipelatous surface with ichthyol ointment, composed of equal parts of ichthyol and vaseline. He then covers the painted part over with 10% salicylic lint, and fixes it on with a hydrophilous gauze bandage. This has absolutely arrested the disease in every case. "In a word," he says, "all symptoms of active irritation were, as it were, charmed away and returned no more." He recommends ichthyol collodion in erysipelas of the face, and ichthyol soap when on the hairy scalp.

He does not claim any antiseptic power for ichthyol, but thinks it probable that its reducing action so starves the nutrient soil of the cocci, that it is no longer suitable for their multiplication.

If this treatment be found so wonderfully successful in other hands, a great boon has been conferred upon us, and the professor is entitled to the gratitude not only of the sufferers, but also of the profession.

DEGREES IN MEDICINE.

The Toronto School of Medicine has applied to the Legislature for University powers, so far as to enable that "Corporation by or through such member or members as they may from time to time elect or appoint for such purpose, to confer the degrees of Master of Surgery and Doctor of Medicine upon candidates.

It seems a very strange departure for a medical school to take, and one undoubtedly calculated, were the powers sought for bestowed upon the school, to lower medical degrees very much in Canada. For were such powers given to one school, they could not with the least show of justice be withheld from any of the others, and it needs no prophet to predict the result of the erection of as many medical graduating bodies as there are medical schools.

Trinity School is also seeking a few slight amendments to her Act of Incorporation, of no importance, outside of the Corporation itself. In view of the bare possibility of the degree conferring power being given by the Legislature, to any school of medicine, the Corporation of Trinity School has petitioned that it is desirable that they should be placed on an equal footing with other medical schools and colleges in respect to the power to grant degrees in Medicine, Surgery, and Midwifery. A section has been added to the Trinity Amendment Bill making due provision in this direction. Let us hope that this section may not be rendered necessary. On looking at the *Ontario Gazette* it appears that the notice of the application of the Toronto School was published more than a fortnight before that of Trinity. We believe we are correct in saying that unless degree conferring powers are given to other medical schools, Trinity has no wish whatever to obtain them. But were they so given, not only Trinity but all other medical schools in Ontario, would of necessity have to obtain equal privileges. Now it is scarcely to be conceived that the Legislature will grant such powers to all the medical schools in the Province. The whole history of University education goes to show that where many institutions in a country are given university powers, the degrees become cheap and comparatively worthless, and the reason for such deterioration is on the surface. Such action on the part of the Legislature would be to throw us hopelessly backwards for years as regards medical education, for we know by experience how tenacious of life even the smallest and most insignificant of degree granting institutions are. The medical profession in Ontario occupy, under present circumstances, at least a respectable position. Let us hope that we shall never fall upon the evil days of the cheap and worthless degrees, which have so long disgraced some of the states in the neighbouring republic; but that our young men

from all medical schools, shall as heretofore, go for degrees in Medicine and Surgery, as well as in Arts, to our universities only.

ONTARIO MEDICAL COUNCIL.—The *Br. Med. Jour.* Feb. 5th, 1887, has the following comments on the proposed action of the Ontario Medical Council, in regard to British qualifications: "It is reported that the Medical Council of Ontario proposes to refuse to register diplomas obtained in Great Britain or Ireland, and to compel all persons holding such diplomas to submit to an examination before the Council. All persons registered in the United Kingdom have been entitled to registration in Ontario without undergoing further examination. The reason for this retrograde step is stated to be, that many students of medicine from the Province, after graduating in one of the universities, travel to England, where they spend one year in further study, and obtain an English qualification, on the strength of which they claim registration on their return to Ontario. As the Ontario Medical Council does not, we are informed, refuse to permit men to practise after a three-years' curriculum, it is not clear that the new regulation is framed in the interest of the public. The new Medical Act (1886) permits the registration of colonial diplomas in this country on and after next June, yet this is the epoch chosen by the Ontario Medical Council to impose a vexatious regulation. What name must be applied to such a course? It is not reciprocity, for the Province withdraws a privilege at the moment that the Old Country grants a privilege; perhaps it is to be styled retaliation. Has not La Rochefoucauld a maxim to the effect that the surest way to turn a friend into an enemy is to do him a service?"

TYPHOID FROM A SINGLE DRAUGHT OF WATER.—M. Dujardin-Beaumetz, reports (*Br. Med. Jour.*), the case of a family which was stricken with typhoid by drinking once of water from a contaminated well. They had rented a house at a fashionable resort, and *then* were warned that the water was dangerous. As a result of such warning, no member of the family used the water until the last day of their stay, when the artificial water they had been using being exhausted, the wife said: "For once, surely, there can be no harm in drinking the well-water." Out of nine persons who partook of it, six have since died from typhoid. On examination, the water was found to contain the bacilli said to be causative of typhoid fever.

PATHOGNOMONIC SIGN OF CANCER OF THE STOMACH.—German writers have held that in cancer of the stomach, hydrochloric acid is always absent. This has been corroborated *(Lancet)* by M. Debove, who finds such a condition to be constant in cases of cancer, and he proposes such it shall be a pathognomonic sign of malignant disease of the stomach. He says hydrochloric acid is constantly present in every other form of indigestion. In the case of a patient shown by him to the Société Médical des Hopitaux, the diagnosis of cancer was made by this means when no other symptom was present, though there is now no doubt as to the nature of the disease. M. Debove proposes that the liquid shall be obtained from the stomach by means of the œsophageal tube, and tested for HCl. Among other tests mentioned is the German one of a solution of gentian violet, 1 to 5000, which gives a blue color with HCl.

CHRYSOPHANIC ACID IN ACNE.—Dr. Metcalfe *(Boston Med. and Surg. Jour.)* highly recommends this agent in acne. He says he has not failed to cure perfectly any case in which the treatment has been adopted. The face is to be washed with soap and well dried, at night. Before retiring, the parts in which the acne is, are to be well rubbed with an ointment of 3 grains of the acid to the ounce of vaseline, and this is repeated nightly until a sharp inflammation of the skin ensues. The inunction is then omitted till the dermatitis is gone, when it is repeated. In most cases a 3-grain ointment is of sufficient strength, but occasionally the strength is to be increased up to 5 grains to the ounce, or even more. The patients are to be cautioned about the staining of their fingers and clothes and to guard their eyes.

CONTAGIOUSNESS OF TETANUS.—The idea that tetanus is contagious is gaining ground. The *Lancet* mentions an interesting paper, read by M. Larger, in which he seems to show clearly that the disease is contagious. He mentions the case of four patients who died of tetanus, after different wounds which should not have produced serious trouble, but who were placed in contiguous beds. Another case is cited in which a veterinary sur-

geon had an epidemic of tetanus in horses, five of which died after castration by an écraseur used on a horse that died of tetanus. The écraseur was then disinfected by heat, and no tetanus was produced in animals on which it was afterwards used.

THE SIR ERASMUS WILSON BEQUEST.—A round-robin has been signed by a large number of the leading medical men in London, and sent to the council of the Royal College of Surgeons, asking that a part of the Sir Erasmus Wilson bequest be appropriated to the establishment of an institution under the direction of the College, which shall have for its object "Physiological and Pathological research." They note the fact that such an institution has long been needed, and that Englishmen have now to look to Berlin, Paris and the other continental cities for the newest developments of physiology and pathology.

REDUCTION OF DISLOCATION OF THE HUMERUS BY RIGHT-ANGLE TRACTION.—We notice several reports in the various journals, relative to the ease with which shoulder dislocation may be reduced by Mr McLeod's process. It consists in making traction at right-angle to the patient's body, steadying the body by the foot, or by any other means the operator chooses. All who have attempted it, seem to regard it as highly successful, the reduction being obtained with the minimum amount of pain and force. The characteristic "snap" is sometimes wanting.

SALICYLIC ACID IN CHANCROID.—The above drug has been recommended by numerous authors in the treatment of chancroid. The sore should be first washed with some antiseptic fluid, and then dusted with finely pulverized salicylic acid. This should be repeated twice a day for four or five days, when the sore will usually have been converted into a simple ulcer. Then nothing more is required than the employment of say a boracic acid lotion, under which it rapidly heals. This plan causes little pain or inconvenience of any kind, and can be carried out by the patient himself.

EXPERT TESTIMONY.—Dr. Darby, of Morrow, O., has submitted *(Boston Med. and Surg. Jour.)* to two days' imprisonment, rather than recede from his position that he should not be called upon to give expert testimony without receiving an expert's fee. He answered as to questions of fact in the case, one of wife murder, but refused to reply to the question "whether in wounds like this there would be immediate gaping, or would the lips of the wound for a time remain in contact, or nearly so?"

OPHTHALMIA NEONATORUM.—The following is given *(Progress)* as an excellent collyrium in simple cases:

℞	Sodii boratis, ...	gr. xv.
	Sodii chloridi, ...	gr. ii.
	Acidi carbolici, ...	mij.
	Aq. destil.	
	Aq. camph.	āā ℥j.

Sig.—Drop into the eyes *p. r. n.*

THE BINIODIDE OF MERCURY AS AN EMMENAGOGUE.—Dr. Illingworth, writing to the *Lancet*, says he has found the red iodide of mercury a certain and safe emmenagogue. He uses the following:

℞	Sol. hydrarg. bichlor, ...	℥j.
	Potass. iodid.	ʒss.
	Ferri. amm. cit.	ʒj
	Ether chlorici, ...	ʒij.
	Aquam ad.	℥viij.

Sig.—℥ss. after each meal.

RESORCIN IN ECZEMA.—Dr. Chace *(Therap. Gaz.,)* reports prompt and complete cures of eight cases of chronic eczema from the use of the following:

℞	Resorcin, ...	ʒij.
	Glycerin, ... q. s. ad.	℥ij.

Sig.—Apply with camel's hair pencil morning and evening.

VOMITING OF PREGNANCY.—Dujardin-Beaumetz gives *(Jour. de Phar.)* the following for the uncontrollable vomiting of pregnancy:

℞	Cocaine hydrochlor. . . .	gr. viii.
	Aq. destil.	℥ x, M.

Sig.—℥j every hour.

ANTIPYRINE IN ULCERS.—Dr. Bosse reports *(Berliner Klin. Wochens)*, the cure of several chronic ulcers by the application of Antipyrine for ten days, followed by an ointment containing 2 per cent of inhate of silver.

PULSATILLA IN ACUTE ORCHITIS.—Mr. Gerard Smith writes to the *Lancet* concerning the action of pulsatilla in inflammatory states of the testicle, epididymus and spermatic cord. He says it subdues the pain so rapidly that morphia is not needed, and that swelling and heat subside "more rapidly than under any other drug."

DEATH FROM PASTEURISM.—The death of a boy at Odessa is reported, from inoculation according to Pasteur's system. He died of rabies, about four months after the operation, though the dog which bit him is still alive, and up to the present time has shown no symptoms of hydrophobia.

INCISION IN TONSILLITIS.—Dr. Maclean recommends (*Br. Med. Jour.*) the early incision of the tonsils in quinsy. He has found that the free use of the knife results in a speedy abatement of all the troublesome symptoms.

VIBURNUM PRUNIFOLIUM IN ABORTION.—This remedy says the *Medizinal Zeitung*, has been lately again brought under notice by Wilson of Liverpool. He has used it with the most gratifying results, especially in cases where abortion was habitual. The author uses it in doses of 2 grs. four times daily, in pills or powders. Opium was only added when the contractions of the uterus were very painful.

HONEY AS A PREVENTIVE OF DIPHTHERIA. Dr. W. L. Smith, of Glanford, Ont., writes to say, that he has observed that where honey has been used freely as an article of diet, cases of diphtheria have not been met with. He would like to hear from his professional brethren on the subject.

BRITISH DIPLOMAS.—Dr. Charles Trow (Trin.), has obtained the L.R.C.P., London, and Drs. Edward Foxten, of Brockville, and Hewitt, of Toronto, have obtained the M.R.C.S. Eng.

APPOINTMENTS.—Dr. H. S. Clarke, of Lucan, has been appointed Coroner for the Co. of Middlesex.

Dr. C. E. Casgrain, of Winsor, Ont., has been appointed a member of the Senate, Ottawa.

Dr. R. P. Howard, of Montreal, has been elected Associate Fellow of the College of Physicians, Philadelphia.

PARTNERSHIP.—The friends of Dr. W. F. Chappell will be pleased to learn that he has formed a partnership with Dr. A. H. Smith of New York.

For full particulars regarding the Medical Council Examinations, 1887, see advertisement.

SOZODONT.—This preparation consists (*American Analyst*) : Soap, 5 parts ; glycerine, 6 parts; spirits, 30 parts ; water, 20 parts. Flavored with several cheap oils, and colored.

GONOCOCCI IN JOINTS AFFECTED WITH GONORRHŒAL RHEUMATISM.—Bergman has recently confirmed (*Centralb. F. Chirurg.*), the views of Neisser and Bockhart on this question. He found the organisms in abundance in the turbid fibrinous fluid taken from the inflamed joints.

J. B. JOHNSTON, M. D.

It is our painful duty to annnounce the death of Dr. J. B. Johnston, of Sherbrooke, on the 2nd of January, at the ripe age of 74 years. The deceased was educated in Edinburgh and took his degree of M. D. from Edinburgh University in 1833, after which he spent some time in the Hospitals of London and Paris. He came to this country in 1845 and settled in Sherbrooke. He had in a great measure retired from practice during the past few years. He was a man of superior education and good judgment, and was well known as one of the oldest and most respected practitioners in Canada. He leaves one son only, a worthy successor of a worthy man, Dr. W. G. Johnston, of Montreal.

A. M. DINGWALL, M.D.

We regret also to announce the death of Dr. Dingwall, of Glanford Ont., at an early age, after a protracted illness of two years. Deceased was a graduate and Gold-Medalist of Trinity University, Toronto. He graduated in 1873. He was also a graduate of Long Island College Hospital. He was a successful practitioner, greatly beloved and respected by those who knew him, and bore his long illness with Christian fortitude. His end was peace. He leaves a loving wife and two sons as well as many other near and dear friends to mourn his loss.

Books and Pamphlets.

DISEASES OF THE BLOOD AND NUTRITION, AND INFECTIOUS DISEASES; being Vol. IV. of "A Handbook of Practical Medicine." By Dr. Herman Eichhorst, Wood's Library for 1886; Illustrated: New York, Wood & Co.

This volume does not fall short of its antecedents in evincement of the wide erudition of this indefatigable author, who seems to have been inspired with the conviction that it behoved him to expatiate on the whole range of human morbidity, with that love of minute details which is the well known virtue of all German writers. It is questionable whether some of the fastidious class of readers might not be disposed to condone the oversight (had it occurred) of a few of his chapters, in which he has treated of diseases, the presence of which in Switzerland must be of very rare occurrence, if indeed it has ever been known. Take, as example, "Yellow Fever." How many cases of this dread malady could ever have come under the observance of the Zurich professor? Was not the medical world already as abundantly supplied with cyclopedic publications, as to have ungrumblingly dispensed with the author's two pages on a disease which has commanded the earnest study of a host of close observers and powerful thinkers, in countries in which it is an endemic resident, or to which it is an enepidemic visitant? It has been said that "brevity is the soul of wit." The reader who, probably thankfully, lights upon Professor Eichhorst's five terminal yellow fever lines, in which he despatches the momentous subject of "*Treatment*," may feel tempted to accuse him of possessing this unnatural German endowment; and as it holds good in our Hibernian fellow-countrymen, that keen wit and the faculty of uttering bulls are twin sisters, so when he finds the leading item of yellow fever *treatment* to consist in the following prescription, he may suspect that the author, or his fore-bearers, have once trodden the soil of the "Island of Saints." Here it is: "Ships, passengers and merchandize from yellow fever ports must be strictly quarantined and disinfected." This, of course was written for the instruction of foreign physicians—not for those of Switzerland, who do not see many ships enter their ports, and need not any quarantine laws to protect them from entrance of the scourge.

Three lines more, for the benefit, of course, of outsiders, dispose of the Swiss treatment of yellow fever. What a benefactor to oblivious Grecians would the author, or his obedient translator, have been, had he felt able to use simpler and shorter words throughout his learned treatise. Aged readers who have long ago forgotten the elements of the Greek language, as well as younger ones who never loaded themselves heavily with etymological spoils, find it trying on their patience, to have continually to search Dunglison for their mother tongue equivalents of polysyllabic jaw-breakers, which if boiled down would have sounded quite as euphonically, and have averted much disquietude. If space permitted, we could furnish a pretty long list of these learned monstrosities; but as the book is one of high general merit, we may safely commend it, as a whole, to the kind verdict of the readers of our LANCET.

DISEASES OF THE LUNGS AND PLEURÆ INCLUDING CONSUMPTION. By R. Douglas Powell, M.D., Lon., F.R.C.P.; Physician to the Middlesex Hospital and to the Hospital for Consumption, at Brompton. Third edition, with illustrations; Wood's Library for 1886. New York: Wood & Co.

This is a book of great value. The author has had ample opportunity for the study of the diseases of which it treats, and no one who reads the work carefully will say that he has not availed himself of the advantages presented in the important professional positions held by him. The style is simple and clear, and the diction is equally free from prolixity and obscurity. Perhaps it may be thought by some readers that the space devoted to the various forms of phthisis—two-fifths of the whole volume—is comparatively long; but it is very natural, and indeed very laudable, that a "Physician to the Middlesex Hospital and the Brompton Hospital" should dwell at greater length on this terrible malady, not indeed, we fear, because of any great advance made of late years in its treatment, but with the view of rendering the etiology and pathology of the disease better understood by the general profession. That Dr. Powell has well succeeded in this relation no experienced or well-trained practitioner of medicine will question. Amid the deluge of new books now teeming from the medical press it is really comforting to light upon one that is worth both the cash outlay and the time devoted to the perusal. This book is worthy of both, and will give a good margin of profit.

THE SCIENCE AND ART OF OBSTETRICS. By Theophilus Parvin, M.D., LL.D., Prof. of Obstetrics, etc., Jefferson Medical College, Philadelphia; Octavo 697 pages, with 214 engravings. Philadelphia: Lea Bros. & Co. $4.25.

The author in his preface says: "This work was begun five years ago, and a task which then seemed comparatively easy grew in difficulty as the author proceeded in his effort to present a clear, and, as far as the limits of such a volume permit, a complete exposition of the Science and Art of Obstetrics." Nearly his entire time, for the last eight months, has been devoted to the rearrangement of material that had been collected, adding to it, and to its supervision as the book was passing through the press. He has endeavored to present the most recent information relating to Obstetrics, at the same time not overlooking important truths established by past experience. Having been actively engaged in practice for upwards of thirty-four years—and nearly two-thirds of that time a medical teacher—he has endeavored to write a book which will be useful alike to students and practitioners. This new treatise on the Science and Art of Obstetrics will undoubtedly prove acceptable and useful to the profession. We recommend it to the attention of our readers.

MANUAL OF LIFE INSURANCE EXAMINATIONS. By James Thorburn, M.D., Edin., Prof. of Materia Medica, Toronto School of Medicine, Surgeon Toronto General Hospital, etc. Toronto: Ellis & Moore.

This little brochure will, we are sure, be gladly welcomed by the medical profession in Canada. The examination of applicants for life insurance is a most important duty, and one requiring a knowledge of many facts not taught in our schools, and not alluded to in the text-books; hence the value of a work of this kind. It deals with classification of risks; influence of heredity and other circumstances affecting the risk; examination of the urine; expectation of life, etc. The work will be found most practical and useful, and should be in the hands of those who are in the habit of examining applicants for life insurance.

HOW WE TREAT WOUNDS TO-DAY. A treatise on the subject of Antiseptic Surgery by Robt. T. Morris, M.D., late surgeon to Bellevue Hospital. Second Edition. New York: G. P. Putnam's Sons, $1.00.

This quaint and unique little work has been most favorably received by the profession. The author says in the "FIRST WORD": "This book is modest only in size. It possesses dignity only in its facts. There is little of originality in what it teaches." The author's idea is "to present in digestible form a dish of truth from which all the bones have been removed." The style, matter and construction of the work bear out the author's statements in his "First Word."

VICARIOUS MENSTRUATION.—Puech has collected the statistics of 200 cases of vicarious menstruation, with a view to determine the parts of the body most liable to be the seat of vicarious hemorrhage. Bleeding occurred from the roots of the hair in 6 cases; from the auditory canal in 6; from the lachrymal gland in 10; nose, 18; gums, 10; cheeks, 3; mouth, 4; bronchi, 24; stomach, 32; mammary glands, 25; axilla, 10; umbilicus, 5; bladder, 8; intestines, 10; hands, 7; inferior extremities, 13; various other regions, 8. In girls who are the subjects of vicarious menstruation, the genitals are always moist at the menstrual periods, and give rise to a muco-sanguinolent secretion.—*Giornale Italiano delle Scienze Mediche.*

MUSCULAR RHEUMATISM DUE TO THE USE OF TOBACCO.—I have met a great many cases of muscular rheumatism (says Dr. Edward Lawson in the *Maryland Medical Journal*) due to the use of tobacco in some form, mostly in the shape of snuff placed under the tongue. All remedies were unavailing whilst the use of the weed was indulged in. Every practitioner, I think, on meeting with a case of the above disorder, should inquire as to the tobacco habit, and correct it, if possible.

Births, Marriages and Deaths.

On the 7th ult., Dr. Jas. Beckwith, of Tusket N.S., aged 76 years.

On the 5th ult., H. M Peters, M.D., of Carleton, N.B., aged 67 years.

In Toronto, on the 20th Feb., Dr. J. W. Patterson, formerly of Harrowsmith, Ont, aged 33 years.

*** *The charge for Notices of Births, Deaths and Marriages is Fifty Cents, which should be forwarded in postage stamps with the communications.*

THE CANADA LANCET.

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Original Communications.

A CASE OF IMPASSABLE STRICTURE OF THE URETHRA SUCCESSFULLY TREATED BY POST-PROSTATIC PUNCTURE.

BY N. E. MCKAY, M.D., C.M., M.R.C.S., ENG.

Surgeon to P. & C. Hospital, Halifax, N.S.

Of the various methods of operating for the establishment of continuous drainage from the bladder the operation termed "post-prostatic puncture," gives the best prospect of success. This operation is easy to perform, and the bladder is tapped in the same place as it is in the rectal operation. The danger of wounding the urethra, prostate, vesicula seminalis or peritoneum is imaginary. It is free from most of the objections which can be raised against the operations recommended in our Text Books on Surgery. It does not interfere with the process of defæcation, neither does it come in the way of the genital tract, and it affords an easy method of draining the bladder. The danger of extravasation of urine with its concomitant evils might be raised as an objection to its performance, but the same objection might be urged against the old operations, and besides, should estravasation take place the urine is likely to follow in the direction of the least resistance and will escape through the perineal opening. It is rather surprising that no author has yet seen fit to recommend in any work an operation, which in my opinion, is likely to supplant those hitherto in vogue. In support of the views set forth above I beg to report the following successful case:

F. W., engineer, aged 32, married, was admitted into the hospital Sept. 21st, 1886, suffering from impassable traumatic stricture of the urethra.

Previous history: Seven years ago patient received an injury in the perineum by falling astride a piece of wood after which he immediately passed a large quantity of blood by the urethra; and ever since, the process of micturition has been attended with pain and vesical tenesmus, and a prolongation in the length of time taken to empty the bladder. Four years ago he had for the first time an attack of complete retention of the urine which was accompanied by severe pain and tenderness in the perineum, relief being afforded by a profuse discharge of blood and pus. Since then he has had periodical attacks of retention every three months, relief being always afforded by a copious discharge of sanguineous pus. In the intervals, although the stream was very much reduced in size, he could void urine without any very great inconvenience. Subsequent to his having received the injury he had two attacks of gonorrhœa but the clinical clerk who took his history omitted to record their dates. Fourteen days prior to his admission into the hospital the patient had an attack of retention, and as usual it was followed by a profuse discharge of blood and pus, which this time gave him no relief. He now consulted a physician, who made several attempts at different times with and without an anæsthetic to pass an instrument but without success. In trying to pass an instrument under an anæsthetic, the doctor, the patient says, used a steel sound, and the attempt was followed by a copious discharge of blood. Patient says the doctor when first called ordered him a warm hip bath, rest in bed, and some medicines, and that in two hours after using the means prescribed he was able with difficulty to partially empty his bladder.

Present Condition.—When admitted, patient was in great pain, having voided only eight ounces of urine during the past twenty-four hours, and that with great pain and difficulty, and most of it in driblets. His bladder was over distended, and rose about one inch above the umbilicus; he had severe pains in the back, hypogastrium, and perineum. The perineum was extremely tender to the touch, and the part of the urethra immediately under the sub-pubic arch was quite thick and indurated to the extent of fully one inch and corresponded to the seat of the main stricture. In the penile portion of the urethra and about half an inch anterior to the scrotum a small cartilaginous ring was found which corresponded with the seat of

the second stricture. The penile stricture admitted a size 7 (English) bougie, and the stricture under the sub-pubic arch, was impassable. The urethra at the seat of stricture was extremely painful and tender. The patient was very restless and had an anxious and pinched appearance; had no appetite; his tongue was coated with a thick brown fur and his pulse weak and frequent. He was greatly emaciated and completely prostrated.

Immediately on admission the house surgeon, Dr. Lockwood, gave him two grains of opium and put him into a warm bath where he kept him until he was nearly faint, and then put him to bed and applied a warm linseed meal poultice to the perineum and hypogastrium. In an hour's time he was able with difficulty to pass eight or nine ounces of urine. Two hours after patient was admitted I saw him for the first time and tried to pass an instrument but the urethra being excessively tender and painful, especially at the seat of strictures, I had to abandon the attempt. To relieve the excessive pain and tenderness I injected two drams of a 4% solution of hydrochlorate of cocaine into the urethra at the seat of stricture, but no relief was afforded. During the next four or five days several unsuccessful attempts were made, with and without cocaine solution, to pass an instrument. During these days patient managed with much pain and difficulty to keep his bladder empty. In the afternoon of the second day after admission, he had a slight attack of retention accompanied by urethral fever, chills and rigors.

At a consultation of the medical staff of the hospital it was determined that an operation was essential to permanently relieve the patient. I accordingly on the fifth day after admission performed the operation termed "Post-Prostatic Puncture," in the following way: The bladder being distended and the rectum washed out thoroughly, the patient under an anæsthetic was put in the lithotomy position, the left index finger well oiled was introduced into the rectum and used as a guide. A rectal trocar and canula was thrust into the median raphe of the perineum three-fourths of an inch anterior to the margin of the anus, and gently pushed on between the rectum and urethra, guided by the left index finger until the posterior border of the prostate gland was reached. I then searched with my finger for the trigone, and having found it I suddenly and forcibly introduced the trocar and canula into the bladder. The silver canula was left in for three days, and the urine drawn every two or three hours. On the third day the canula was replaced by a gum elastic catheter, and the urine allowed to constantly dribble away through a tube which was fastened by one end to the catheter, the other end being kept in an antiseptic solution. On the fifth day after the operation the catheter became blocked—it being only size seven, English. The patient's temperature suddenly ran up to 103½°, and he had a very pronounced chill—but on cleaning the tube thoroughly his temperature at once fell to normal, and henceforward his improvement was uninterrupted. From the time the operation was performed the patient was almost entirely free from pain, and the urine which was ammoniacal and loaded with mucus and pus, began to improve in colour and quality. On the 6th day of October—the tenth day after the operation—I succeeded in passing a flexible bougie, size 2 F., without giving the patient any pain, and on the tenth a size 3 was easily passed. From this time the rapid dilatation method as recommended by Mr. Savory was adopted and continued for five or six days until a size 7 F. was easily passed; after this the gradual dilatation method was resorted to. On the 7th of October the urine began to ooze a little on either side of the catheter, which was removed on the 11th, and the patient was allowed to pass urine *per viam naturalis*. During the following three or four days four drops of urine escaped through the opening in the perineum in the act of micturition, but at no other time. When he left the hospital on the 20th of October a size 9 F. was easily passed and he could void a good large stream, and there was no perceptible leakage through the perineal opening.

To perform the operation of "Post-Prostatic Puncture," with the best prospect of success, a trocar and canula of a size 12 English should be used and the canula should at once be replaced by the largest size gum elastic catheter that can be introduced. By using these precautions the danger of the catheter becoming blocked is almost entirely removed. In my case I was obliged by force of circumstances to use a size 8 Eng., and a correspondingly small size catheter.

The patient who was very unpleasant and hard to manage, left the hospital against our wishes

before complete cure could be effected. However the success of the case while under my treatment serves to prove the feasibility of the operation as well as its many advantages over the old operations. In conclusion I must express my gratitude to the Clinical Clerk Mr. Pearman, for the careful and accurate way in which he recorded the history of the case

CASES IN PRACTICE.

BY PRICE BROWN, M.D., L.R.C.P., GALT, ONT.

Case I. Mrs. D., a primipara, was delivered of a fine healthy female child on the 1st January, 1886. The labor was normal; and the mother made a good and rapid recovery. On the third day the nurse noticed a slight pink spot, circumscribed and nearly a quarter of an inch in diameter, in the centre of the infant's right cheek. My attention was not drawn to it until the middle of February. The cheek presented a well marked case of arterial telangiectasis. The tumor was bright scarlet, half an inch in diameter, and elevated a quarter of an inch; it was very hot, compressible, and producing an elevation of temperature on that side of the face of several degrees; I advised an early operation, but ineffectually. Two months later, during my absence from home, the mother applied to another physician who vaccinated the nævus, but without any good result.

In October the mother again applied; she still refused an operation, but was willing to have anything else done. The tumor was greatly enlarged, over an inch in diameter, circular, and elevated half an inch: still the same bright scarlet color. Thinking it a good opportunity to try the experiment, I determined to try "Borugeri's Treatment or Telangiectasis." He recommends that the spots and area of skin two mm. beyond, be painted four days in succession with a four per cent solution of corrosive sublimate in collodion. "The cure" he says, "is rapid and painless." The promise of good results was at first very fair; the application produced no pain, checked the growth of the tumor, and cooled the surrounding cheek; at the same time a dense thick scab was produced; in a few days this loosened round the edges, and could be partially taken off without resulting in hemorrhage; still the nævus was there, though slightly less elevated. Accordingly I continued to test its efficacy for three weeks, making the applications at intervals of two or three days, and taking off the scabs as circumstances allowed.

At one time there was some ptyalism; but as the infant was teething, though no teeth had appeared, I did not think it arose from the absorption of mercury; several thick crusts had been shed, and the growth did not seem to be more than at the commencement. At this stage I doubled the strength of the corrosive sublimate, carefully watching its effects; no salivation resulted; the surface was however getting raw, and the application of the eight per cent. solution produced considerable pain; the crusts were thicker; but the arterial feeding branches beneath, being fully up to their work, seemed to sustain an almost equal combat. Believing that I had given the treatment a fair trial, with a very doubtful prospect of a successful issue, the little patient was given a two weeks' rest; by this time the crusts were thrown off; the tumor presented a smooth surface, outline almost as extensive as at the commencement of treatment, and with every prospect of a more rapid growth. The vein leading down from the nævus to the angle of the jaw, was very large and distinctly visible.

The parents having reluctantly consented to an operation, Dr. Sylvester kindly administered chloroform. I ligatured according to Liston's plan, with the exception that instead of passing the first needle across the tumor unarmed, and raising it by means of the needle, I armed the needle with strong silk cord, and raised the growth on it, so as to pass the cross needle below it, thus simplifying the operation. We thought it advisable also to dispense with cutting the skin. The sutures were drawn very tightly. In the course of ten days the outside shell separated, leaving a fungoid mass in the centre. Another ligature was thrown round it, completely separating the growth in the course of another day; a healthy cicatrix soon followed; it is diamond shaped, of the same hue as the cheek, and gradually contracting, giving promise of very little deformity.

The points of interest in connection with this case are: 1st. The impunity with which a strong solution of bichloride of mercury was so frequently applied without producing absorption, and the consequent ptyalism; and, 2nd. The possibility

which it presented of removing smaller nævi and similar growths effectually and without pain.

CASE II. Obstruction of the bowels. J. B., a retired farmer æt. 88 years, had in the summer of 1884 an attack of erysipelas of the left leg. The œdema was very extensive, to relieve which I lanced it freely in several places, resulting in copious discharges of pus and serum. The old man made a good recovery: but as he was thin, and his blood much impoverished, I prescribed dialysed iron to be taken for a considerable time. I then lost sight of the case until March 17th, 1885, when I was again summoned. He told me that with the exception of short intervals, he had taken the iron regularly for two months after I had prescribed it; he had been very well, with the exception of some constipation and occasional chills. These chills occurred every two or three weeks; he would go to bed, apply hot applications, and be all right next day. During the winter however, the chills had increased in frequency as well as severity, and for some days had been diurnal; he had postponed obtaining advice, thinking that the symptoms were incidental to his extreme age; latterly his stomach had ceased to retain solid food; and even fluids in any quantities would be rejected; his bowels were obstinately constipated and urine loaded with bile.

On examination he presented an emaciated appearance; his whole body was of a dark hue; eyes yellow, and tongue heavily coated. The abdomen was generally contracted; but in the right upper portion of the umbilical region there was a solid tumor, placed almost vertically, inclining slightly to the left; the length seemed about four inches, and the breadth and thickness two; it was movable to a limited extent. The diagnosis was obstruction of the bowel—but not of the colon—the position not being identical with the latter. If of the colon, why should there be jaundice and emesis of all solids? If of the duodenum these results would naturally follow. In treatment I refrained from injections, believing that it would be impossible to reach the obstruction with any prospect of a successful issue. One ounce of castor oil was administered and retained; six hours later there had been neither vomiting nor purging. There was however considerable tympanites: so much so that it was impossible to accurately define the tumor. The ounce of oil was repeated and a slight poultice applied.

18th—There had been a stool, though scanty, containing small pieces of hard scybalous matter. The tympanites was somewhat less, and the tumor could be defined. It seemed smaller; was a little lower down, and lying to the right of the umbilicus. The hour for the customary rigor had passed by without its occurrence. With some difficulty I got the patient to take another large dose of castor oil; towards evening he had a very copious stool, composed largely of similar hard almost black scybalous matter in small angular pieces; tumor still perceptible though smaller. During the next two days, the patient took a teaspoonful of castor oil each morning, resulting in full evacuations. The abdomen became quite flat; tumor had disappeared, together with the jaundice. No rigor had occurred since commencement of treatment, and appetite for solid food was returning. By proper care his bowels subsequently continued regular; and there has been no recurrence of the obstruction. Several weeks ago I met him taking a constitutional; he told me he was ninety years old the previous Tuesday. *Remark*—If the obstruction had been in the ascending colon, its progress would naturally have been across the abdomen and down the left side, instead of diagonally and to the right of umbilicus. Query: Had the dialysed iron anything to do with producing the obstruction?

Correspondence.

To the Editor of the CANADA LANCET.

SIR,—I would like to draw your attention to an omission in the statute regulating the jail delivery of the pauper insane, and the injustice frequently done to members of the profession by reason of it. I refer to the discretionary power given to the county judge or the sheriff to select a medical examiner, in addition to the jail surgeon, to fill the certificate of insanity.

Many of the patients whose cases require asylum treatment are among the poorest in the community, and the physician whose heart is reputed to be the largest is sent for, and on him devolves all the trouble and labor of securing entry for his pauper patient to the asylum, through the common jail. It is only after such patients are imprisoned and become wards of the State, that the services of the physician are recognized, that is, the statute provides for the payment of fees to two physicians

(one of whom is to be the jail surgeon), to certify to the mental condition of the patient. Now, in the name of all that is fair, reasonable and courteous, who should the other be? I believe the unanimous opinion of the profession is, that the one who initiated the proceedings and had all the labor, should be chosen. But what do we find? The gentleman who knows everything concerning the history of the case is entirely ignored, and one who is wholly unconnected with the case—whose qualifications are not those of a specialist in mental diseases, is selected by the sheriff to fill the certificate and claim the fee.

In several of the States, I believe, the law expressly recognizes the *right* of the attending physician, and names him to be one of the examiners. Our statute should certainly be amended in this respect.

Yours, VERA PRO GRATIS.

Reports of Societies.

CHATHAM MEDICAL AND SURGICAL SOCIETY.

CHATHAM, March 11th, 1887.

Dr. Rutherford, president, in the chair.

Dr. Holmes related a case of lithotrity in a young man aged 26. A phosphatic calculus was removed in two sittings, the fragments of which weighed ʒ iii ʒs. Patient made a good recovery.

Dr. Fleming read a paper on a case of Fracture of the Trachea, with laceration of the external soft parts. On the 6th of March, 1884, he was summoned to see J. B., æt. 46, a spare, muscular man. Found him suffering from a fracture of the trachea, with laceration of the external soft parts, and just rallying from a profuse hemorrhage. An examination of the wound with the finger started the bleeding again, which nearly proved fatal from loss and asphyxia. His violent efforts to expel the blood from his lungs, made it almost impossible to do anything to stay the hemorrhage. He was placed on his side, as well over on his face as possible, and ice applied. The bleeding ceased in a few minutes; he was conveyed to his home and placed in a large airy room, kept at a temperature of about 80° F. and its air moistened with steam. No attempt was made to close the wound, which was dressed with oil silk, over which an ice-bag was kept constantly applied. Pulse 120, temp. 100° F. He was given ergot and bromide of potassium, with a diet of milk and beef-tea. Five days later violent secondary hemorrhage set in, lasting half an hour. Similar treatment was pursued to that adopted for the arrest of the primary hemorrhage. A large quantity of fluid and clotted blood was coughed up, and the bleeding ceased when nature seemed about exhausted. He rallied slightly, when, with an almost superhuman effort, he dislodged a firm, dense clot about as large as a horse-chestnut, with immediate relief. Nourishment was given him as soon as expedient, and the bromide increased. Pulse 126, temp. 102°, though both were about normal before the hemorrhage. Thirty-six hours later, moderate hemorrhage again occurred, lasting twenty minutes. For a week after this his temperature ranged from 100° to 102° F., but remained normal the balance of his convalescence. Six weeks after the injury the wound was closed by a fibro-cellular membrane, and during this time not more than ʒ iv of pus was secreted. The fourth, fifth and sixth rings of the trachea were divided, the ends separating about half an inch, while the posterior portions of them were somewhat twisted upon themselves. The missile, a square-ended white ash stick, 3½ft. x 1in. x $\frac{5}{8}$in., was broken into two pieces by the resistance it met. It was shot like an arrow from a drive-wheel making 1400 revolutions per minute, striking immediately above the sternum and a little to the left of the median line. Since the accident, he has suffered from diplophonia and experiences much difficulty in expectorating mucus. *Treatment.*—The hemorrhage was controlled by ice, it being impossible to ligate the vessels or to apply sufficient pressure to arrest it. Inserting a tracheotomy tube and packing the wound was inadmissible, while the lungs were loaded with blood. Ergot and pot. bromide were given to lower blood-pressure and to lessen the irritation.

Dr. Holmes favored using ergot but not the bromide, owing to its depressing action on the system and its soothing influence on the bronchial tubes. Thought opium, combined with atropine, would perhaps be better.

Dr. McKeough said a night-cap device, applied to the head and fastened to the chest, was very useful in controlling the movements and keeping the chin in a flexed position. Opium was open to the same objection as the bromide.

The President would be inclined to use ergot and bromide, carefully watching their effect upon the patient. He thought belladonna might be useful. He wished to know the prospects of the patient always having a patulous trachea.

Dr. Fleming, in reply, said he used bromide, as the patient had no symptoms of heart failure at any time. Did not fear contraction of the trachea.

BRANT MEDICAL ASSOCIATION.

The regular quarterly meeting of the Brant Medical Association was held in Brantford, March 2nd; the president, Dr. A. J. Henwood, in the chair. There was a good attendance, including as visitors Dr. Rosebrugh, of Hamilton, and Dr. Carson, Brantford. Dr. Rosebrugh read a paper on "Points in Abdominal Surgery," confining his remarks to the uterus and its appendages. Among the laparotomists he mentioned were Tait, Bantock, Thornton, Keith and Schroeder. He described their different styles of operating, mentioned their hobbies, and gave some of their statistics with regard to laparotomies. The writer of the paper considered Mr. Tait the greatest living abdominal surgeon, and in the course of his paper touched on the points characteristic of Tait's method of operating. Among these points were the following: His assistants, three or four in number; his material for sutures, which has been boiled, but not otherwise disinfected; his utterly ignoring antiseptics; his anæsthetic, 1 part chloroform, 2 parts ether; his sponges and instruments, rigidly clean, but not antiseptic; the smallness of his incision; the rapidity with which he works; his great manual dexterity; the tying of the pedicle with the Staffordshire knot, cutting it short and dropping it; the flushing of the abdomen with a large quantity of hot water, to counteract shock and for cleansing purposes; the introduction of a drainage tube, and suturing of the incision, the sutures being one-half inch or further apart. The writer also mentioned Tait's method of treating incipient peritonitis by a brisk purgative, which, he asserts, cuts short the inflammation.

DR. J. H. PACKARD, of Philadelphia, is expected to be present and to read a paper at the meeting of the Ontario Medical Association in June next.

Selected Articles.

TREATMENT OF RETENTION OF THE PLACENTA AFTER ABORTION.

What is to be the conduct of a physician in cases of abortion, when the fetus has been expelled and the secundines remain in the cavity of the uterus? This question has been a theme for considerable discussion in the last years. Two complications have been observed as arising from the retention of the secundines, they are: *hemorrhage* and *septicæmia*. A certain number of accoucheurs, who look upon these complications as frequent, recommend constant intervention, when the adnexa have not followed the expulsion of the fœtus in the course of several hours. The methods of proceedure recommended by them are numerous and varied. Some introduce the finger into the uterus and seek to detach, break away or remove the placenta; others resort to the forceps for the better accomplishment of this purpose; others again employ the curette, either dull or sharp. Mundé, for example, uses only the dull curette, and also recommends the avoidance of a force which might injure the woman. But the curette with cutting edges also has its partisans, to scrape the walls of the uterus and to withdraw the debris of the ovum. Lately, besides curetting with the sharp or dull instrument the additional use of a tampon has been resorted to. In a certain number of cases the tampon is sufficient without a previous recourse to the curette.

It is, however, not always easy to operate within an uterus the dimensions of which are so small in the beginning of pregnancy, and whose cervical canal is hardly permeable; it may become necessary to practice dilatation, either with the finger or by means of mechanical dilators, as the sponge, laminaria or tupelo tent. To facilitate this method some physicians seize the neck with a pair of vulsellum forceps and draw it down to the vulva. In short, all means are resorted to, and these means vary according to the nature of the case, and the fancy of the physician for the purpose of removing the secundines from the uterine cavity. Is this mode of conduct really rational and necessary? It seems to us that two things must be shown to render it justifiable:

1. That retention of the placents is really a source of frequent accidents. 2. That all digital and instrumental manipulations to which recourse are had ofler no danger. *First.*—Is the retention of the placenta following abortion really a source of frequent accidents? We have collected all the observations made in our service at the Charité from the month of May, 1883, to May, 1886, and in addition to this, with the permission of M. Tarnier, have included all the cases of abortion which

have been attended at the Masternité from July, 1883, to July, 1886. The following are the results:

Out of a total of 210 cases (57 at the Charité and 153 at the Masternité, there was 46 times retention of the placenta, giving a proportion of 22 to 100. The after period was habitually uncomplicated after complete abortion, and the morbidity was almost nil; but what were the observations in cases of retained secundines? At the Charité there was never any hemorrhage when the delivery was slow. At the Maternité only twice was their slight hemorrhage, which came on at the moment of expulsion of the placenta. Of 24 cases of retention observed at the Maternité, 21 presented no accidents, the puerperal state being normal. Three presented the following particulars:

One woman in whom the placenta remained in the uterine cavity showed some signs of infection, which rapidly disappeared after intrauterine injections of Van Swieten's fluid; another case, a victim of criminal abortion, who was admitted to the hospital with an elevated temperature, recovered rapidly; finally in another patient who had bronchitis and fever before her admission to the hospital, the placenta was expelled entirely in about sixteen hours. The offensive lochia disappeared completely after uterine injections, but the fever and all other symptoms which had existed at the beginning, increased, and the patient died from pneumonia fourteen days after the abortion. To recapitulate, out of 210 cases of abortion there were 46 cases of retention of the placenta. Accidents following this retention have been rare, only one woman died, and it is doubtful if her death could be attributed to septicæmia. Hence when women are placed in conditions favorable for asepsis, retention of the placenta is not so frequenty a source of accidents as has been pretended.

Secondly, are all the digital and instrumental manipulations resorted to for the extraction of the secundines completely free from danger? We will only ask those interested in this question to read carefully the observations which have been made up to the present day. They will see that the finger alone is generally insufficient in detaching the placenta and removing it entire. Forceps are managed with difficulty in the interior of the uterus, and often they will leave the remains of the secundines behind them. To the use of the curette, and especially the sharp curette, has been attached the chief blame as founded upon facts. P. Mundé says that they appear powerless in detaching the remains of a placenta situated in one of the horns of the uterus. In spite of a careful scraping of the uterus portions of the placenta have been left behind in the interior of the uterus, as the observations of Skjelderup and of Doleris have shown. In a case referred to by Moses, in which the uterus had been well scraped, washed and cauterized with perchloride of iron, he was not a little surprised to find next day expelled "a fœtus without legs, 6 to 7 centimetres in length, which in spite of the use of the sharp curette, had remained in the uterine cavity without giving rise to any other symptoms." The curette acts blindly. It is also dangerous; in cutting healthy mucous membrane it opens the gates for infection, says J. Veit; a hemorrhage persists which is often very hard to arrest, of which Moses has cited a striking example. Finally, when one is obliged to have recourse to dilitation it is not always free from danger. Schwarz of Halle has reported two cases of considerable laceration of the neck, one of which extended up to the broad ligament.

Thanks to the use of the antiseptic method, the results have not been so bad as one would believe; however it may be seen that these (so-called) preventive measures place the woman at the brink of septicæmia and possible hemorrhage, abundant loss of blood being not very rare. In one of the cases reported by Moses cauterization with the perchloride of iron was not sufficient to arrest hemorrhage, as the patient fell into collapse and he had to use the tampon. Not all patients have escaped septicæmia: Moses has noted an endometritis in four cases, and Mundé pelvic cellulitis; Fehling has observed three instances of grave pelvic abscess; Consentina and P. Mundé have observed death supervene in spite of treatment, or it was even due to the treatment itself.

Hence for our part, contrary to the opinion established by certain authors, the retention of the adnexa of the fœtus is only rarely the origin of complications, if recourse be had to antiseptics. On the other hand, of the different methods of intervention which have been counseled and put into practice, some are insufficient, others dangerous. Hence we never deem it necessary to interfere when, the fœtus having being expelled, the placenta remains in the uterine cavity. One may content himself with the observance of cleanliness and the use of antiseptic vaginal injections two or three times a day, and the secundines will be expelled spontaneously. But when complications arise, grave hemorrhages or the phenomena of septicæmia, either because no antiseptic precautions had been taken or because unsuccessful attempts at extracting the secundines have been made, which often favor the rise of these accidents, what ought then to be done? Without desiring to enter into the details necessary for each case in particular, we will resume in a few words the proper mode of conduct:

Against severe hemorrhage the tampon is the means par excellence, and the only one which is truly efficient; and when we speak of a tampon we mean one made of cotton or charpie, previously rendered aseptic by being immersed in a solu-

tion of carbolic acid, corrosive sublimate, etc. If the phenomena of septicæmia exists in the beginning, vaginal antiseptic injections should be made every two hours or every hour. They often suffice and the complications cease entirely. If at the time of the first visit the symptoms of infection are very grave, or if these accidents do not yield readily to vaginal injections, recourse should be had to intra-uterine aseptic injections, employing a solution of corrosive sublimate, 1 to 2000 or 1 to 3000, or carbolic acid, 2 or 3 to 100, etc. In making these intra-uterine injections care should be taken that no obstacle opposes the flow of the injected fluid; a ready flow can be secured by the use of the horse shoe shaped sound. In this manner the cavity of the uterus is in all probability rendered aseptic, a result rapidly attained, as evident from the cessation of the fetid character of the lothia and the fall of the temperature. General treatment should not be neglected, and we should especially insist on the administration of the sulphate of quinia. This method, practiced at the Maternité by M. Tarnier, and which we have followed at the Charité has given the results mentioned above. It seems to us difficult to improve upon them. It ought not to be implied, however, that this is expectant treatment, pure and simple to which we have recourse. The old expectant plan, good as it was, has come down to our day, improved, thanks to vaginal and intra-uterine antisepsis. This treatment has thus been benefitted by the improvements which have been gradually made upon it.

We will add that this method—expectant and antiseptic, can be followed by physicians and midwives, which is no small advantage.—*Dr. Budin in Progress Medicale.—Obstetric Gazette.*

THE CAUSE AND PURPOSE OF MENSTRUATION.

The object of this paper is to obtain an answer to the following questions: 1. Is ovulation periodic or not? 2. What connection exists between ovulation and menstruation? 3. Is there connection between menstruation and conception? The researches of Raciborsky, Pflüger, Leopold, and others, seemed to prove that there is a decided connection between ovulation and menstruation. Autopsies on many healthy woman, dying suddenly during menstruations, have revealed, in the majority of instances, the presence of a ripe or ruptured follicle on the surface of the ovary. The inference is therefore justifiable that ovulation accompanies menstruation, occuring either before, or just at the beginning, or at the end. This inference, however, is denied by many on the ground that the rupture of the Graafian follicle is known to occur also in the intermenstrual period, whence the opposite inference that there exists no causal relation between menstruation and ovulation. The weight of evidence at the present day points to ovulation being not dependent on menstruation, and also not periodic. Such being admitted as the case, how are we to account for the periodicity of menstruation? Leopold's explanation is the following: Menstruation is a phenomenon typical of the female organism, its motor cause residing in the ovaries, its immediate source being the uterus. Its periodicity is analogous to other vital phenomena of the organism—pulse and respiration for instance, the rhythm of which we are as unable to account for as for the regularly recurring monthly uterine hemorrhage. F. considers the periodicity of menstruation to be rather analogous to the erection of the penis and ejaculation of semen in the male. The friction on coitus leads in a reflex manner to ejaculation of semen. Ejaculation is speedy after abstinence, the more frequent the act of coition the greater the amount of friction requisite before the reflex is strong enough to lead to ejaculation. Similarly with menstruation. Each ripening follicle is a cause of irritation to the ovarian nervous supply. This irritation is propagated to the sympathetic system and its vasomotor filaments. From the irritation of the vasomotors there result dilatation of the pelvic bloodvessels and hyperemia of the pelvic organs, evidenced by the sensation of congestion and fulness in the pelvis which women experience about the time of the periods. When this irritation becomes powerful enough—it being added to by the ripening of other follicles—there results menstruation, which is the external evidence of the inward congestion. (This theory is rather fanciful, and takes absolutely no account of the not rare cases where conception occurs during lactation, in the absence of menstruation and yet necessarily in the presence of ripening of Graafian follicles.) It having been proved that ovulation goes on uninterruptedly, should not conception be as likely to occur at one time as at another? Heuser has investigated carefully the subject of conception and reached the following deductions: The majority of conceptions result from the coitus occurring within a few days after menstruation. During menstruation, the the chances of conception increase the nearer coitus to the end of menstruation. The number of conceptions following coitus before menstruation is small. At no time, however, during menstruation or in the intermenstrual period, is conception impossible. Since, however, ovulation goes on constantly, why, F. inquires, is conception more likely to occur at the end of menstruations and on the few days thereafter? The answer to this question is obtained from a study of the changes which occur in the mucous membrane of the uterus before and after menstruations. From the researches of Leopold and of Wyder and others, these changes may be briefly resumed as follows: Shortly before, during, and partially after men-

struation, the uterine mucous membrane is hyperæmic, the glands distended, the secretion increased, the muscular walls of the uterus softened, and the blood-vessels widened—in short the entire organ is in a condition of excessive nutrition. Coincidently with the onset of menstruation, the epithelium of the mucous membrane becomes fattily degenerated, and, at the cessation of menstruation, this epithelium is renewed. It is evident now that the impregnated ovum can engraft itself more readily, and finds conditions suitable for its development whilst the above changes are going on in the uterine mucous membrane, than when this membrane is covered with intact epithelium. The shedding of the degenerated epithelium reaches its maximum at the end of menstruation, at a time when regeneration of epithelium is just beginning. The most favorable time, therefor, for the ovum to engraft itself is within a few days following menstruation. A further question to be answered is, how account for the cases where women have repeatedly conceived and yet never menstruated? At the outset, it has never been proved that the same changes do not occur in the mucous membrane of the uterus in such cases as where menstruation has occurred, and further, in many such women, close inquiry reveals the fact that, whilst there has never occurred menstruation in the sense of a red discharge, there has existed a more or less profuse white discharge, which takes the place of the customary red. In short, menstruation is not to be judged by the blood which appears externally, but by the changes which take place in the mucous membrane of the uterus, and these are causes of menstruation.—*Arch. f. Gyn.*

DANGER IN TOAST.

A Russian author in a recent novel makes all his principal characters devils. Satan, as chief, directs the lesser devils each to his separate task, which is to corrupt mankind, and to bring sorrow and woe where there had been happiness and rejoicing. With what success the story tells

If we can conceive of disease as some archfiend, bent upon bringing pain and suffering and helplessness and death to the whole human family, using as his emissaries broods of bacteria, each seeking and finding their own organs to attack, we have here materials for a tragedy equalling in interest Tolstoi's weird tale.

But the foes of health are not all included in the various forms of cocci. There are many other causes of disease that work with charming regularity, and all the more so because they are entirely unsuspected One of these is toasted bread. An innocent-looking thing, and yet, like the Grecian horse before the walls of Troy, it works sad havoc when once inside.

It is with some hesitancy that I venture to say anything against toasted bread, for did not our mothers and our grandmothers and our great-grandmothers always give it in sickness, and does it not even now hold a sacred place in the heart of every housewife? Surely an idol-breaker is not to be envied, and yet I can not forbear giving a few plain facts from my own experience tending to show that there are times and circumstances under which it seems to do great harm.

Years ago, a room-mate in college was taken with typhoid fever. He passed safely through the disease and was considered convalescent, when near the fourth weak his physician permitted him to eat a piece of toasted bread softened in milk. Three hours later he grew worse, had a relapse, and died in a few days.

Some time ago I was called away from my practice, at a time when I had two typhoid-fever patients in charge—one convalescent, the other in the third week. I cautioned the families not to give them toast as they grew better, but as soon as the morning temperature became normal it was given, resulting in a relapse, though not a fatal one, in each case.

Last summer several dysentery cases suffered relapses in the same way from eating toast.

One illustration will suffice; Mrs. B——, a delightful lady, was taken very severely with this trouble. Large enemata, and hydrarg. bichlor., gr. $\frac{1}{100}$, every two hours brought speedy relief. A diet list was carefully made out and a special and emphatic warning left against toast. But with a perversity of appetite which others may be able to explain, toast was the one and only article of food which she wanted. A liberal bill of fare had no attractions for her; toast alone would satisfy her craving, and toast she ate. (Who is prepared, in the light of this incident, to say that the story of Eve and the apples is a myth?) An hour or two after indulging she was taken with violent pains (I refer to Mrs. B——, not to Eve) and all her symptoms returned in an aggravated form.

She was a very penitent and tractable patient during the rest of her illness and has permanently abandoned the use of toast in sickness. I had five other cases, where, after the pain and discharges had ceased, they were brought on again by the use of toast. I have seen it produce pain and vomiting in gastric catarrh, in fibroid induration of the stomach, or whenever there is inflammation of the mucous membrane of the gastro-intestinal tract. In inflammatory diarrhœas of children the anxious mothers are forever giving toast, and it in turn is forever giving pain and diarrhœa. It would seem as if the gritty particles of charcoal, insoluble in the juices of the stomach, are shoved up and down over the irritable mucous membrane like so much powdered glass, and finding their way into the intestine scratch the inflam-

ed Peyer's patches, or the angry mucous membrane, as the case may be, renewing and aggravating inflammatory action.

We are taught to beware of the danger that is dissolved in our drinking-water, of the germs that lurk in the air, of the mince-pies that linger in our stomachs; ought we not in inflammatory conditions of the stomach and bowels, to enforce a strict quarantine against the "pernicious activity" of toast?—E W HEDGES, M.D. *in Med. Record.*

THE TRANSFERENCE OF SOME HYSTERICAL SYMPTOMS FROM ONE PATIENT TO ANOTHER UNDER THE INFLUENCE OF A MAGNET.

One of the conclusions which was reached by the Committee of the *Société de Biologie* in 1876, on the action of metals, was that sometimes when a magnet was applied to one side of a hysterical patient, such unilateral hysterical symptoms as there were, shifted themselves to the other side of the body, and, as M. Charcot afterwards remarked, oscillated for a while from side to side. Fresh experiments made by M. Babinski, as *chef de clinique* under M. Charcot at the Salpêtrière, have been recently reported in the *Société de Psychologie physiologique* as showing that two hysterical patients may play the part of the two sides of the body, even when there is no connexion between them; *i.e.* they may be placed back to back even without contact, and the symptoms of the one will shift to the other without any apparent means of intercommunication. There were two groups of experiments: (1) where two similar hysterical girls were experimented upon, and (2) where one of these girls was in combination with a new patient unknown to her. In the first group the two hysterical girls (whom we will call A and B) were put back to back on two chairs. They were both hemi-anæsthetic. A magnet was laid on a table touching B's arm. In a very short time A lost all her hemi-anæsthesia and B became completely anæsthetic on both sides. The bilateral affection was soon transferred to A, and B became normal, and there were several such oscillations: when A and B were widely separated, they relapsed gradually into their original states of hemi-anæsthesia. In these subjects, hysterical paralysis could be easily produced in any limb with or without contracture. If, for example, A's left leg was paralysed thus with contracture, and she was put back to back with B and in contact with her (B having meantime the magnet touching her arm), then the paralysis and contracture of A's leg disappeared, and was shifted to B's leg on the side generally which touched the magnet, and subsequently oscillated between the two subjects. In the same way A might be made dumb if she was told she could not speak, and this dumbness would shift from one to the other. These experiments in transference were most easily done when both the subjects were in the somnambulic stage of hypnotism, but have sometimes been successful when both were in a normal waking state. If A was put into the somnambulic stage, and B left in contact with the magnet in a normal state, B soon became somnambulic and A woke. With a view to avoid collusion, a second class of experiments was made, in which one of the co-operators was A or B and the other a man or woman with hysterical paralysis, entirely unknown to A or B, who had never before been hypnotised. The method was that A or B should be hypnotised with the magnet in contact with her arm, and then the new patient introduced, and made to sit back to back with her. Under these conditions, the new patient generally lost the paralysis, and A or B acquired it, and for a time it oscillated between them, remaining finally with the new patient. In some cases, however, after several such experiments it disappeared altogether, so that this method might be called in some cases curative, and this suggestion M. Babinski proposes to follow out. He is anxious to emphasize the distinction between his cases and those in which the body has been said to serve as a conductor for the influence of the magnet. MM. Proust and Ballet have published such cases, in which two hemi-anæsthetic girls have been made to hold each other's hands; the magnet was applied to one of them, and after an hour both recovered complete sensation. M. Babinski considers that by his method of conducting the experiments, fraud and suggestion were both excluded, and points to the fact that the results were just as successful on the first trial as after practice. When a hysterical paralysis was produced in A, with a view to testing whether it would be transferred, B was always kept out of the way, so that she could not see or hear anything that had been done to A, and A was covered with a sheet to prevent her from being seen when B was introduced into the room. If the experiment was between A or B and a new patient, care was taken that A and B should be completely ignorant of the condition of the new patient. The magnet was always applied to the arm wherever the paralysis or contracture to be transferred might be.—*Progres Medical.*

CHALK OINTMENT AS AN APPLICATION IN ERYSIPELAS.

My former preceptor, Professor Hughes Bennett of Edinburgh, used to say that, whenever a long list of remedies was recommended as of value in the treatment of any disease, one might feel sure that very little was really known either about the nature of the disease or the means of expediting

recovery from it. I think he specifically mentioned erysipelas as an instance in point. Certainly, both the local and the internal remedies which have been vaunted as beneficial in this disease are sufficiently numerous. I feel, therefore, some hesitation in recommending one which may or may not be novel, but inasmuch as it is certainly harmless, if not actively beneficial, and has stood the test of some experience, I venture to direct attention to it. The local application I now allude to is an ointment composed of prepared or precipitated chalk and benzoated or purified lard.

It appears to be quite immaterial whether the *creta præparata*, or the *calcii carbonas præcipitata* of the Pharmacopœia be employed. Although the latter is a crystalline powder, and the former amorphous, both, when pure, are for all practical (*i.e.* clinical) purposes impalpable. To secure suitable consistency, and to ensure full benefit, it is necessary to incorporate a large amount of chalk in the ointment. It is noteworthy that lard will blend with an extraordinary quantity of chalk, either by beating in a mortar, or by adding it gradually to the lard previously melted. It is possible to make a very dense ointment by blending two and a half ounces of chalk with one ounce of lard. This is too firm to apply to a painful erysipelatous part, and in cold weather it almost crumbles. Experiments have been made for me both by Messrs. Dinneford and in the Hospital Apothecary's department with prepared and with precipitated chalk, and the best results as to quantities have been attained by mixing *equal proportions* of each, the lard being previously melted. Half a drachm of pure carbolic acid may be added to each ounce of the ointment. That prepared with *creta præparata* is of the color of putty. The other is pure white. Both are equally serviceable.

As I have already stated, I am unaware if this local application has been previously employed. I can find no recommendation of it in any work on Materia Medica known to me. I have used chalk ointment occasionally for many years, but not of the strength proposed in this paper. The earliest recommendation of a thick chalk ointment I can find is that of Mr. J. C. Spender, of Bath, who introduced it as an undoubtedly valuable preparation for intractable ulcers of the leg. In his book entitled *Observations on the Causes and Treatment of Ulcerous Diseases of the Leg*, published in London in 1835, he remarks that the best outward application is an ointment containing a very large quantity of prepared chalk. "The earthy matter," he states, "must be in a greater proportion than enters into any ointment in the Pharmacopœia, consisting of about three pounds of chalk to two pounds of lard." He advises that the lard be first melted and the chalk gradually added in order to secure more intimate blending than can be attained by simple admixture or trituration.

In a re-issue of this book by his son, Dr. J. Kent Spender, of Bath, in 1868, the same process is again recommended. The ointment is to be applied with the finger and smeared thickly over the erysipelatous part. A mask of plain lint or of boracic lint should be laid over this and properly secured.

Patients express themselves as feeling relieved by this, and prefer it to other applications which may have previously been used. An ointment of this kind and consistency presents several advantages over the old method of dusting flour over the affected part, especially on the face, since, to be effectual, the dredger has to be constantly in use. The flour also gets within the eyelids, causing sometimes great irritation of the conjunctivæ. I venture to commend, with some confidence, the local application of chalk ointment in erysipelas as being at once cleanly, unirritating, readily procurable and trustworthy, and at the same time cooling and soothing. In severe cases, it may be necessary to re-apply the ointment twice or oftener every twenty-four hours. I think I may add that this preparation is now the favourite one in the erysipelas wards of St. Bartholomew's Hospital.—Sir Dyce Duckworth in *The Practitioner*.

THE TREATMENT OF CHRONIC METRITIS AND ENDOMETRITIS BY INTRAUTERINE ELECTROLYSIS.

At the association Française pour l'Avancement des Sciences, Dr. Apostoli read a paper, of which the following is an abstract: In the treatment of chronic metritis, and more especially in chronic endometritis, intrauterine electrolysis has been used for the past four years with most satisfactory results, Dr. Apostoli employing it in preference to all other means of intrauterine treatment. The immediate chemical action of the electricity is to produce a gradual destruction of the mucous membrane, this being soon followed by a process of retrograde metamorphosis, which favors the absorption of exudation, hyperplasia, or new growths.

The apparatus necessary to make an intrauterine electrolytic application is as follows, it being necessary that the operator should understand its use and action: A. A medical galvanometer graduated to two hundred milliamperes, to measure the quantity of electricity used. B. A galvanic battery with large cells, so as to last a long time without being refilled. Thirty cells should never give less than two hundred milliampères. The best cabinet cell is the Leclanche. A good portable battery does not exist, though the bisulphate of mercury from will answer for the purpose. C. An intrauterine electrode with insulated handle. D. Apostoli's clay electrode, which, when applied over the abdomen, produces neither pain nor heat,

even with an intense current. E. Flexible and strong connecting cords.

The rules for the electrolytic application are: 1st. Have the patient in the recumbent posture, and give an antiseptic vaginal douche. 2d. Adjust the connecting cords between battery and electrodes, and apply the clay electrode over the abdomen, telling the patient beforehand how cold it will feel. 3d. Carefully introduce the warmed and oiled intrauterine electrode. 4th. The uterine poles should be positive in all hemorrhagic uterine diseases, and negative in others. 5th. Start the battery. We should never take a patient by surprise or make a too painful application. Some uteri are very irritable, and can stand only a feeble current at first. Begin with a mild current, and increase the strength as the patient becomes accustomed to it. Generally after the third application, the strength of the current can be raised to two hundred milliampères, the strength being regulated by the tolerance of the patient, the duration, gravity, and extent of the disease. 6th. The duration of the sitting should be from five to ten minutes, according to the intensity of the effect desired and the reaction of the parts. 7th. The application may be repeated every second day or once a week, according to the necessities of the case. 8th. A rest in bed of a few hours must be observed after each sitting to prevent an inflammatory reaction, and to aid the effects produced. 9th. Vaginal injections of carbolic acid or mercury bichloride solution should be used morning and evening.

This simple and inoffensive treatment is a galvano-chemical destruction of the mucous membrane of the uterine canal, either by the acid or basic pole, as the case may require. The destroyed mucous membrane may be replaced by a new and healthy one, or may serve as a surface for exudation so long as may be required. Apostoli has shown the beneficial effects of this treatment in a large number of cases, improvement being shown after the first few applications, and cure soon following. The patients are only obliged to keep in bed for a few hours after each sitting. Compared with curetting, this treatment is more lasting, easier, and less apt to be followed by inflammation.—*Am. Jour. of Obstet.*

EXTRAORDINARY CARDIAC EXCITEMENT BEFORE A FIRST MENSTRUATION.

Dr. Draper reported the following case before the Obstetrical Society of Boston: The patient was an overgrown, nervous, well-developed girl, aged thirteen years and two months. Two years ago she was under medical treatment for chorea. During the past three years she had not attended school. Recently, her health had been satisfactory, and it was the intention that she should presently resume school discipline. Her mind was undeveloped and her tastes were childish; she liked the plays and companionship of little girls much younger than herself. She had never menstruated.

In the night of July 1st, she was restless and uneasy, sleeping but little. Her mother attributed the unrest to a somewhat later and heartier supper than she was accustomed to and recalled also that the girl exercised rather more vigorously than usual after supper. Dr. Draper saw the patient at 3.30 A.M., July 2nd. She was tossing, restless, anxious, and irritable. She complained of pain in her left side and of the "thumping" of her heart. There was an occasional short, dry cough—the familiar cough of cardiac palpitation. The hand over the heart detected a rapid but regular and not violent action of that organ. The stethoscope discovered no abnormal sounds; the rapid action was the only abnormality. There was no irregularity or intermission, then or later. The heart-beats, at this visit and subsequently, were counted as follows:

July 2d, 3.30 A.M.	212	July 4th, 9.30 A.M.	234
" 2d, 7.30 P.M.	232	" 4th, 5.15 P.M.	230
" 3d, 10 A.M.	228	" 5th, A.M.	98
" 3d, 5.30 P.M.	236	" 6th, A.M.	80

The highest temperature which the thermometer recorded meanwhile was 100 5°, in the afternoon of July 2d. The culmination of the case was reached July 5th, in the afternoon of which day menstruation began in a perfectly normal manner, without pain or other disorder. The pulse quickly regained its normal rate and kept it thenceforward. In August and September there was no recurrence either of the catamenia or of cardiac disturbance.

During the three days, July 2d, 3d, and 4th, various measures directed to the control of the heart were wholly negative in their effect. Rest in bed, low diet, counter-irritants, emetics, cardiac sedatives and stimulants (aconite, veratrum, digitalis), proved unavailing; but with the premonitory indications of the menstrual function the heart resumed its natural action.—*Boston Med. & Surg. Jour.*

MEDICAL NOTES.

Prof. Parvin states that *pruritus vulvæ* may be sometimes due to wild hairs.

Prof. Bartholow thinks *ptyalism* can be averted by giving atropine combined with the mercurial.

A most valuable remedy for *functional impotence*, especially when accompanying hypochondriasis, is the chloride of gold and sodium.

Atropine can be better managed, the results more readily reached and controlled, than can be accomplished by any of the preparations of bella donna.

Prof. Da Costa, in a case of *polyuria*, gave fluid extract of ergot in ℥ss doses three times daily. The cause was traced to grief occurring some time previously.

Equal parts of the fluid extracts of digitalis, ergot and ipecac, just enough ipecac to cause nausea, is, according to Prof. Bartholow, a good combination for *pulmonary hemorrhage.*

It may not be generally known that a poultice of digitalis leaves, to cover the whole abdomen, will act both on the heart and kidney in *scarlet fever* of other conditions, when its administration by the stomach is contra-indicated.

A *uterine fibroma* is being treated at the Jefferson Hospital by galvanism. The positive pole is applied to the sacrum, the negative pole to the tumor through the vagina. The strength of the current used is 15 milliampères, as determined by a galvanometer.

As a lotion for *tinea circinata*, Prof. Da Costa advised the following :—

℞ Sodii sulphitis, ... ℥ iij
Glycerini, ... f℥ ss
Aquæ, ... f℥ iijss. M.
Sig.—Apply to part.

Paralysis of the arm, due to pressure on the nerves by lying with arm under the head, was treated at the Hospital by a blister along the course of the musculo-spiral nerve, the local use of a mild faradic current, and the internal administration of iodide of potassium.

A good test for *atropine or belladonna poisoning* is, that the urine of the patient when subcutaneously injected into a cat will cause dilatation of the pupil. Therefore, in order to prevent reabsorption in belladonna poisoning, it is always well to keep the bladder emptied.

For *chronic catarrh* :—

℞ Potas. acetatis, ... ℥ j
Tinct. ferri chlor., ... f℥ j
Acid. acetic. dil., ... f℥ ss
Elixir simplicis, ... f℥ j
Aquæ . . . . . q.s. ad f℥ vi. M.
Sig.—Teaspoonful four times a day (Da Costa).

The centesimal solution of nitro-glycerine is of late being much prescribed in *chronic Bright's disease*, that form known as chronic parenchymatous nephritis, and with excellent results. The initial dose is usually gtt. j *ter in die*, and the patient is instructed to increase the dose gradually until the physiological effects are produced.

Prof. Da Costa states that the method of *intubation*, as devised by Dr. Dwyer, of New York, is one of the greatest advances in medical science. He speaks in its favor very warmly, because while perfectly harmless in itself, it does not prevent an after-tracheotomy, if such should be necessary.

A case of extremely *fetid bronchitis*, which before treatment was expectorating one and one-half pints in twenty-four hours, was in a month's time cured, so that only half an ounce was expectorated in the same length of time; the agent used was oil of sandal wood, and was prescribed by Prof. Da Costa, in gtt. v. doses, to be taken three times daily; afterward increased to five times.

Prof. Parvin gave the following directions as to treating an *acute vaginitis* of cause unknown. Patient should be put to bed in order to insure rest, and twice in the twenty-four hours she should take a warm bath, with a Fergusson's speculum in the vagina to allow free access of the water to the parts. Give a saline cathartic, and for the first three days use soothing vaginal injection of ulmus or flaxseed. After this time can then use a $\frac{1}{1000}$ solution of corrosive sublimate or a 2% or 3% solution of carbolic acid, warm. If the cause has been specific, nothing is better. After a week, we can then begin astringent injections of sulphate of copper, gr. ii-iv, tannin, gr. iii, or borax, or alum, gr. iv-v to the ounce. An objection to tannin is its staining. If good results do not follow the injections, resort to tampons saturated with glycerine and tannin, or paint the parts with solution of nitrate of silver, often swabbing them out thoroughly.

THE PROGNOSIS IN VALVULAR AFFECTIONS OF THE HEART.

Probably in nothing else is the young practitioner so much at sea as in the matter of prognosis, or so frequently the subject of derision at the hands of the laity. The importance of prognosis as an element of medical knowledge is often overlooked by authors and teachers, yet scarcely a day passes that a physician is not met with questions as to prognosis that demand for their solution a deep knowledge of the probable course, the effects, and the duration of some disease, and this is particularly true of diseases of the heart. A lad is brought to us, for example, with a damaged heart, and our advice is asked as to what course of life he ought to pursue. Shall we entail upon him a life-long course of idleness and incapacity? Another desires to marry. Shall we dissuade him from taking this step? A third is leading an active business life. Shall he be advised to retire and perhaps live in obscurity and comparative poverty the rest of his days—which may be longer than we predict? In view of the importance of such questions, the profession can but feel grateful to Sir Andrew Clark for presenting, at the last meeting of the British Medical Association, the results of his vast observation, as is to be found published in

the association's "Journal." What makes his remarks of particular value to the general practitioner is the fact that they treat of cases observed in private practice for a long term of years. More than this, they throw a ray of hope and encouragement into the darkness of despair brought about by the teaching of Laennec and the subsequent pathological school. The very title under which they are grouped is comforting—"Cases of Valvular Disease of the Heart known to have existed for over Five Years without Causing Symptoms." He has tabulated *in extenso*, with great care and precision, all the cases of which he has notes, occurring between 1873 and 1886—684 cases in all. Apart from the cardiac symptoms, the persons applied for advice on account of the most varied manifestations. In selecting his cases, the author excluded all instances of mere "murmurishness," all of murmurs that were inconstant and intermittent, all of murmurs occurring within the pulmonary and tricuspid areas, and all of murmurs, of whatever kind, in patients who, independently of cardiac examinations, had subjective or objective symptoms of heart disease. Attention is drawn to some "afternoon" cases, as the author styles them (eleven in number, not included in the tables), which very graphically illustrate the long duration of cardiac disease without characteristic symptoms. We can refer only to two of them.

In one instance, in 1842, the house-governor of one of the largest hospitals in London was rejected by a life insurance company on account of a damaged heart, and was told that he might not live longer than six months. In consequence of this he was superannuated, on full pay, by the hospital committee. In 1854 this person consulted the author for indigestion, and at that time a loud, rasping systolic murmur was heard, not only in the mitral area, but all over the left side of the chest. Beyond the symptoms of indigestion, due to the patient's indiscretions, the murmur was the only evidence of cardiac disease. Without being particularly careful, he continued to live, work, and enjoy life until 1874, when, at an advanced age, he died of an acute bronchitis.

In another case, that of a lad sixteen years old, there was enlargement of the heart, a loud systolic bruit was heard in the mitral area, there were direct and regurgitant aortic murmurs, the impulse of the heart was diffuse and heavy, the cervical veins were rather full, and the pulse was somewhat jerking and collapsing. The boy said he suffered nothing, but felt quite well. The family had been told that he was the subject of grave heart disease, and the consultation had been sought for merely to ascertain by what means his life could be prolonged as much as possible. They were advised to follow out their intention of giving the lad a university education, which they did. This was fifteen years ago, and now the subject of the consultation is the incumbent of one of the largest parishes in England, and continues to pursue an active, useful, and comfortable life.

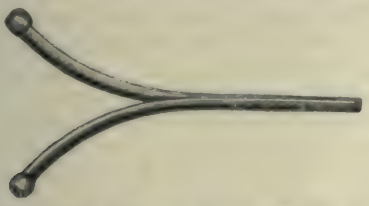
Sir Andrew Clark expresses himself to the effect that organic murmurs of the heart, although firmly established and lasting for some years, may eventually disappear, and cites several cases illustrating the fact. What are the conditions which justify a favorable prognosis in a given case of valvular heart lesion? According to the author, they are the following: (*a*) good general health; (*b*) proper habits of living; (*c*) no essential liability to rheumatic or catarrhal affections; (*d*) an origin of the valvular lesion independent of degeneration; (*e*) an existence of the valvular lesion for over three years without change; (*f*) sound ventricles of moderate frequency and general regularity of action; (*g*) sound arteries, with a normal amount of blood and tension in the smaller vessels; (*h*) a free course of the blood through the cervical veins; (*i*) freedom from pulmonary, hepatic, or renal congestion. To these must be added obedience to properly adjusted rules of health, which, however, need not interfere with the performance of the usual duties of life.

The author sums up as follows: 1. There are many persons with long standing disease of the heart engaged in the active business of life, who, without any symptom of heart disorder, have enjoyed good health and have reached an advanced age. 2. The mitral regurgitant murmurs so often encountered in cholrea disappear for the most part within eight or nine years of the attack. 3. Valvular inflammations and their effects, arising in the course of rheumatic fever, do sometimes disappear and leave behind no clinical evidence of their former existence; this occurs, for the most part, in the young, but also sometimes in the middle aged. 4. The signs of valvular defects arising out of degenerative changes of middle life do also, on rare occasions, disappear, and when circulatory and respiratory disturbances accompany their beginning they sometimes subside and admit of apparently complete readjustment. 5. As there must be, in the histories, habits, occupation, and surroundings of patients with valvular disease, conditions which in one case bring about secondary disorders, and in another exempt from them, these differences should be searched for and made capable of application in practice. 6. Any systematic and critical study of the subject, likely to lead to practical issues, could be undertaken only by the Collective Investigation Committee, and not by it unless actively assisted by experienced general practitioners who possess in a special manner the knowledge necessary to the end in view. 7. A joint inquiry of the kind proposed, conducted with due patience, discrimination, and accuracy, would greatly extend our knowledge of the natural history of diseases of the heart, and largely increase

our means of assisting those who suffer from them.—*N. Y. Med. Jour.*

A NEW CATHETER ATTACHMENT.

This simple contrivance may be attached to a catheter, in washing out the bladder and other cavities. The attachment is shaped as the cut here represents. The extremity is to be inserted into a soft rubber catheter, or any other kind when required; one of the branches is connected with a Davidson or similar syringe by a short piece of rubber tube or directly to a fountain syringe; and the other to a rubber tube from one to three feet in length, as may be required; the latter is the



efferent or waste tube, to draw off the injection. The tube can be compressed by a clamp, wire spring, or, which is far better, the thumb and finger, while the injection is running into the bladder or other cavity. Empty the bladder by releasing the compression on one tube, and stopping the flow through the other; this operation may be repeated as often as may be desired. A fountain syringe or graduate bottle is the best to use, as the quantity of injection can be carefully regulated and pressure controlled. The attachment is nickle-plated, made by Codman and Shurtleff, Boston, and costs 75 cents.

"Idiots Savants."—This name has been applied to children who, while feeble-minded, exhibit special faculties which are capable of being cultivated to a very great extent. One youth was under my care who could build exquisite model ships from drawings, and carve with a great deal of skill, who yet could not understand a sentence, who had to have his food dissected for him, and who when writing to his mother, copied *verbatim* a letter from *The Life of Captain Hedley Vicars*, by Miss Marsh, although it had not the slightest appropriateness in word or sentiment. Another has been under my care who can draw in crayons with marvellous skill and feeling, in whom, nevertheless, there was a comparative blank in all the higher faculties of mind. Extraordinary memory is often met with, associated with very great defect of reasoning power. A boy came under my observation who, having once read a book, could evermore remember it. He would recite all the answers in *Magnall's Questions* without an error, giving in detail the numbers in the astronomical division with the greatest accuracy. I discovered, however, that it was simply a process of verbal adhesion. I once gave him Gibbon's *Rise and Fall of the Roman Empire* to read. This he did; and, on reading the third page, he skipped a line, found out his mistake, and retraced his steps. Ever after, when reciting from memory the stately periods of Gibbon, he would, on coming to the third page, skip the line and go back and correct the error with as much regularity as if it had been part of the regular text. Later on, his memory for recent reading became less tenacious, but his recollection of his earlier readings never failed him. Another boy can tell the tune, words, and number of nearly every hymn in *Hymns Ancient and Modern*. Often memory takes the form of remembering dates and past events. Several children under my observation have had this faculty in an extraordinary degree. One boy never fails to be able to tell the name and address of every confectioner's shop that he has visited in London—and they have been numerous—and can as readily tell the date of every visit. Another can tell the time of arrival of all the children at an institution, and could supply accurate records in relation to it if needed. Another knows the home-address of every resident who comes under his observation, and they are by no means few. The faculty of number is usually slightly developed with feeble-minded children, whilst memory is fairly well developed; and yet I have had under my observation cases where the power of mental arithmetic existed to an astonishing extent. One boy, about twelve years of age, could multiply any three figures by three figures with perfect accuracy and as quickly as I could write the six figures on paper; and yet, so low mentally was he that, although having been for two and a half years in the almost daily habit of seeing me and talking to me, he could not tell my name. Another boy, who has recently been under my observation, can multiply two figures by two figures; while another can multiply rapidly two figures by two, and a short time since could multiply three figures by three figures, but since an epileptiform attack has lost this faculty to some extent. None of them can explain how they do it; I mean by what mental process. It has appeared to me, however, when by rare chances they have made a mistake, and some hesitation has arisen, the plan has been to clear of the multiplication of the higher figures first. Improvisation is an occasional faculty. I had a boy under my care who could take up a book, pretending to read—an art he had not acquired—and improvise stories of all kinds with a great deal of skill, and in any variety, to suit the supposed tastes of his auditors. Memory of tune is a very common faculty among the feeble-minded; they readily acquire simple airs and

rarely forget them. I have had one boy under my observation who, if he went to an opera, would carry away a recollection of all the airs, and would hum or sing them correctly. In none of the cases of "idiots savants" have I been able to trace any history of a like faculty in the parents or in the brothers and sisters, nor have I had any opportunity of making a necropsy, except in one instance. This was in the case of a boy who had a very unusual faculty, of which I have never since met another example, namely, the perfect appreciation of past or passing time. He was 17 years of age, and although not understanding, so far as I could gather, the use of a clock-face, could tell the time to a minute at any part of the day, and in any situation. I tried him on numberless occasions, and he always answered with an amount of precision truly remarkable. Gradually his response became less ready . . . . his health became enfeebled, and the faculty departed. At a necropsy I found that there was no difference in his cerebrum from an ordinary brain, except that he had two well-marked and distinct soft commissures . . . . All these cases of "idiots savants" were males; I have never met with a female.—Dr. J. Langdon Down, in *Br. Med. Jour.*

MANAGEMENT OF SIMPLE CONSTIPATION.—1. On first walking in the morning, and also on going to bed at night, sip slowly from a quarter to half a pint of water, cold or hot. 2. On rising, take a take a cold or tepid sponge bath, followed by a brisk general towelling. 3. Clothe warmly and loosely; see that there is no constriction about the waist. 4. Take three simple but liberal meals daily; and if desired, and it does not disagree, take also a slice of bread and butter and a cup of tea in the afternoon. When the tea is used it should not be hot or strong, or infused over five minutes. Avoid pickles, spices, curries, salted or otherwise preserved provisions, pies, pastry, cheese, jams, dried fruits, nuts, all coarse, hard, and indigestible foods taken with a view of moving the bowels, strong tea, and much hot liquid of any kind with meals. 5. Walk at least half an hour twice daily. 6. Avoid sitting and working long in such a position as will compress or constrict the bowels. 7. Solicit the action of the bowels every day after breakfast, and be patient in soliciting. If you fail in procuring relief one day, wait until the following day, when you will renew the solicitation at the appointed time. And if you fail the second day, you may, continuing the daily solicitation, wait until the fourth day, when assistance should be taken. The simplest and best will be a small enema of equal parts of olive oil and water. The action of this injection will be greatly helped by talking it with the hips raised, and by previously anointing the anus and the lower part of the rectum with vaseline or with oil. 8. If by the use of all these means you fail in establishing the habit of daily or of alternate daily action of the bowels, it may be necssary to take artifical help. And your object in doing this is not to produce a very copious dejection, or to provoke several smaller actions; your object is to coax or persuade the bowels to act after the manner of nature by the production of a moderate more or less solid formed discharge. Before having recourse to drugs, you may try, on waking in the morning massage of the abdomen practised from right to left along the course of the colon; and you may take at the two greater meals of the day a dessert-spoonful or more of the best Lucca oil. It is rather a pleasant addition to potatoes or to green vegetables.

9. If the use of drugs is unavoidable, try the aloin pill. Take one half an hour before the last meal of the day, or just so much of one as will suffice to move the bowels in a natural way the next day after breakfast. If it should produce a very copious motion, or several small motions, the pill is not acting right; only a fourth, or even less, should be taken for a dose. When the right dose is found it may be taken daily, or on alternate days until the habit of daily defecation is established. Then the dose of the pill should be slowly diminished, and eventually artificial help should be withdrawn. The aloin pill is thus composed; R.—Aloinæ, ½ gr.; extr. nucis vom., ½ gr.; ferri sulph.; ½ gr.; pulv. myrrhæ, ½ gr.; saponis, ½ gr.; fiat pil. I. If the feces are dry and hard, and *if there is no special weakness of the heart*, half a grain of ipecacuan may be added to each pill. Should the action of the pill be preceded by griping and the character of the action be unequal, half a grain of fresh extract of belladonna will probably remove these disadvantages. If the aloin pill gripes, provokes the discharge of much mucus, or otherwise disagrees, substitute the fluid extract of cascara sagrada, and take from five to twenty drops in an ounce of water either on retiring to bed or before dinner. And when neither aloin nor cascara agrees, you may succeed by taking before the mid-day meal two or three grains each of dried carbonate of soda and powdered rhubarb.

The exact agent employed for the relief of constipation is of much less importance than its mode of operation. If, whatever the agent may be, it succeed in producing after the manner of nature one moderate formed stool, it may be, if necessary, continued indefinitely without fear of injurious effects. But, treated upon physiological consideration, I have the belief that in the great majority of cases simple constipation may be successfully overcome without recourse to aperients.—Sir Andrew Clark in *Lancet.*

THE SURGICAL TREATMENT OF HYDATIDS OF THE

LIVER.—The last meeting of the London Medical and Chirurgical Society was entirely occupied in discussing the treatment of hydatids of the liver. Mr. Barwell opened the discussion by reading a paper on the subject, in which he proposed a modification of the treatment of incision. He recommended that puncture, with a small trocar, should always be primarily employed, but where this failed he advocated the making of a free opening, to be kept open some time. In the paper read last Tuesday he advocated the employment of "a two-stage method." The abdominal walls were to be first incised, and the cyst or its surroundings stitched to them. After a few days' delay the cyst was then to be opened. Mr. Warrington Haward thought the method dangerous, as fluid might escape when stitches were inserted into the parent cyst. He preferred the use of caustic potash to form a fistula leading down to the cyst, and then free incision of the latter. Mr. Howard Marsh said he had successfully employed Mr. Barwell's method on a large cyst. Mr. Harrison Cripps narrated a case in which he had made an exploratory incision, and, finding a suppurating hydatid, had enucleated it along with its capsule. A large cavity was left in the liver, and into this a second tumor was seen bulging, and was removed. Sir Dyce Duckworth thought he had seen good results from all these surgical methods. Mr. Walsham observed that even tapping had its dangers. Cases of sudden death had occurred in which it had been suggested that a vein might have been punctured and the hydatid fluid introduced into the circulation. He had not himself had any occasion to perform any preliminary operation of stitching the cyst or its surroundings to the abdominal walls. After securing the cyst in a safe place by forceps, he emptied it at once. He then syringed it out with carbolized water, and after filling it with iodoform, inserted a drainage tube. Dr. Angel Money mentioned a case in which, during the operation of puncture, a daughter-cyst entered a vein and lodged in the right auricle, causing sudden death. Mr. Pearce Gould said he supposed no one would attempt such an operation as Mr. Barwell advocated while simpler methods, such as puncture, were availabie. If a further operation than puncture were required, he advocated free incision, and related two cases in detail. He would, he said, first tap with an aspirator, then pull out the half-collapsed cyst, stitch it to the abdominal walls, and evacuate the contents. Mr. Henry Morris said that, as to stitching to cyst to the abdominal walls before opening it, he saw no objection to Mr. Barwell's plan, but little in its favor. He considered it important not to interfere with the parent cyst in any way, to take out as many daughter-cysts as possible, and refrain from antiseptic injections. He had seen delirium produced by iodoform. Mr. Barwell, in his reply, also condemned iodoform as dangerous. Potassa fusa treatment he considered tedious and painful. He remarked that the discussion had shown him that other surgeons had used the plan he advised, but he had not previously been aware of this.—*Med. Record.*

A CASE OF TETANUS SUCCESSFULLY TREATED WITH CHLORAL HYDRATE.—I think the following notes on a case of idiopathic tetanus treated with chloral hydrate throughout the greater part of its duration may prove interesting, as indicating the almost specific effect of the drug and the large doses tolerated in this often intractable complaint.

A healthy country lad, aged thirteen, employed in out-door work, was taken ill with symptoms of tetanus about a week before my attendance was requested on Nov. 16th. When I saw him he was lying on his back in rigid opisthotonos; dorsal region and thorax prominently arched, and stretched towards the right side; head drawn back; eyelids partly closed; lips retracted, exhibiting marked risus sardonicus; muscles of the neck and trunk hard and board-like; lower extremities extended; breathing hurried and shallow. The boy had been unable to sleep. The jaws were firmly clenched to within about a quarter of an inch. I ordered belladonna liniment to the spine, powdered jalap with calomel, and a sudorific mixture three times a day. As he resided at some distance from my house, two days elapsed before I saw him again, when his condition had undergone no change. The bowels had freely acted. Linseed-meal poultices sprinkled with turpentine were applied to the dorsal region, and ten grains of chloral hydrate, with twenty grains of bromide of potassium, were given every four hours. Nov. 21st: Has had two hours' sleep, the first he has had since the beginning of his illness. Decubitus natural; opisthotonos much relieved, but not disappeared. Countenance natural; lips no longer retracted, but the jaws are clenched as before. To continue treatment, and apply a mustard-and-linseed poltice to the nape of the neck. 22nd: Slight improvement. 24th: The chloral to be increased to twenty grains and the bromide of potassium to thirty, and taken every four hours. 27th: Can open his mouth more freely, and speak distinctly, but the rigidity persists in the abdominal and thoracic muscles; the neck is easier. To apply linseed poultice with turpentine to the neck as before. To continue the treatment. Dec. 2nd: Lies placidly in bed; answers questions distinctly; sleeps for two or three hours, but never more than three; bowels act regularly; takes semi-solid food. To continue the treatment. 6th: Is going on fairly well, but some rigidity continues, especially in the trunk; can move the feet freely. The chloral treatment was now suspended for four days, and henbane with fœtid spirit of ammonia substituted, but no improvement followed. 10th: Ordered fifteen grains

of chloral hydrate, twenty minims of tincture of lobelia, and twenty minims of compound tincture of cinchona, thrice daily. 13th: Belladonna plaster applied to the whole dorsal region. To continue the treatment. 17th: Has obtained further relief, the rigidity becoming less. To continue the mixture. Is wearing the plaster, which he feels to be beneficial. 22nd: Is altogether better. To continue the mixture and repeat the belladonna plaster. 24th: Is very comfortable, and almost convalescent. 29th: Was able to enjoy his Christmas dinner downstairs with the rest of his family. Appears to be fairly well. To discontinue the treatment.

Remarks.—This was a case of idiopathic tetanus brought on by exposure to wet and cold. It presented the symptoms of trismus very markedly, and there was absence of sleep for a long time. It appears to me that chloral alone or combined with bromide of potassium controlled the severity of the disease, and if it did not actually cure the malady it afforded time for nature to exert its recuperative power.—Dr. Hawkes, in *Lancet.*

TREATMENT OF CHOREA.—In a recent number of the *Medical and Surgical Reporter*, Dr Hiram Corson emphatically calls attention to the value of cimicifuga racemosa in chorea of childhood. He affirms, as the result of fifty years of experience, that it is always successful in a brief time if a teaspoonful of a good fluid extract be given four times a day. This use of cimicifuga racemosa is a very old one, which was insisted upon by the late Dr. George B. Wood, and which, as pupils of that great master, we have long employed.

Some hundreds of cases of chorea have come under our care in the public service at the Philadelphia Hospital, and especially at the University Hospital. In the earlier years the fluid extract of cimicifuga racemosa was always relied upon and administered as soon as the patients presented themselves. Experience has emphatically taught us, however, that it is distinctly inferior to arsenic; so that at present every patient coming to the Dispensary with St. Vitus' dance is put upon the arsenical treatment. In the few cases in which this fails, the next routine administration is of the fluid extract of cimicifuga. We can only explain the superiority which cimicifuga has asserted over arsenic in the hands of Dr Corson by the supposition that the doctor has never used arsenic with sufficient freedom.

The arsenical preparation must be given in ascending doses until it produces evidences of its physiological action, and to order this requires a little boldness on the part of the physician. If, however, the patient be well watched and the remedy be withdrawn as soon as puffiness appears in the face, no harm can be done. Cimicifuga is not an inert substance, as seems to be thought by some practitioners. Probably much of the cimicifuga that is administered has lost its activity, which appears to depend upon a volatile principle. But we have seen a teaspoonful of the good fluid extract, even in an adult, produce headache, with excessive giddiness and great prostration.

We may add that when, some years ago, the bromide of iron was highly recommended by Dr. Da Costa in the treatment of chorea, we made an extensive and thorough trial of it, and found its therapeutical action as near negative as we can well imagine. In a number of cases it simply did no good at all.—*Therapeuti. Gazette.*

A RAPID METHOD IN THE TREATMENT OF FRACTURES.—Dr. von Donhoff, of Louisville, thus describes a rapid method of treating fractures:

"1. Strips of sole leather or gutta percha (tin will answer also) of suitable breadth and length being at hand, these are immersed in hot water and adjusted, by means of a roller, to the site of the fracture, previously reduced and properly swathed in cotton wool; the latter should be secured in position by a few turns about it with sewing thread. [Anæsthesia is a *sine qua non* to the proper manifestation and reduction of fractures.] "2. If no suggestive incident intervene, such as shortening, angularity, or great uneasiness and pain, the *first* dressing, in cases of fracture of the shaft of long bones, should not be removed until the tenth day, but should never be permitted to remain longer than the sixth day in similar injuries of joints. "3. On the fourteenth to the twentieth day, barring cases in which untoward diathetic or local influences have been demonstrated to exist, it will be found that the fragments are fixed, and that the dressing may be dispensed with altogether, except in fractures involving joints; in these the splints, properly stitched together, should be readjusted on going to bed, in order that the unconscious and possibly violent movements of the patient may not prove disastrous. "4. Gentle, passive motion of fractured joints should be begun at least as early as the sixth day after the first dressing, and practiced every second day thereafter until the fourteenth, increasing the degree of motion as may be suggested by the judgment of the surgeon. After this date, the dressing being left off, the matter of moving the limb may be relegated to the inclination of the patient, unless he be too timid, when he may safely be encouraged to handle light objects and practice normal motions of the limb. "5. The average duration of treatment need not exceed twenty-eight days, under ordinary circumstances. "The above rules of practice have proven equally reliable in the treatment of compound fractures produced in osteotomies done for the correction of deformities near the ends

or in the continuity of long bones. "6. The posture of the limb should be that best adapted to muscular equipoise — straight, or in an obtuse angle."—*Am. Med. Digest.*

Treatment of Abdominal Wounds.—The treatment of abdominal wounds has been under discussion by the Paris surgeons lately, and, as usual they are divided into two camps, one party holding, with Professor Trélat, that laparotomy ought to be done at once, and the other, with M. Verneuil, that the expectant treatment is proper. M. Trélat says that it is a precept in America that in all doubtful cases the belly must be opened to ascertain the condition of the intestines. M. Réclus lately expounded the idea of the expectant treatment, and it is that of many good surgeons. Setting aside wounds made with large projectiles in time of war, and referring only to the every-day cases of pistol-shot and stab wounds, "What happens," he says, "when an intestine is cut by a ball or a knife? Why, there is an effusion of lymph, and, if they can be kept quiet, the divided parts will certainly join and heal." Therefore with Taillaux, Deprés, and others, he proposes the following plan of treatment: "When the patient is first seen, don't attempt to probe the wound, but wash it with a solution of corrosive sublimate (1 to 1000), and close it with a little collodion; then put the patient's body in as complete a state of immobility as possible by position in bed, give opium enough to stop all peristaltic action, apply an ice-bag to the abdomen, and allow no food but iced milk, not more than a tablespoonful at a time." Of course if peritonitis comes on, or even if there is a discharge of fæcal matter from the wound, larparotomy is indicated; but it is astonishing how a pistol-ball may remain in almost any part of the body during the life of the individual without doing the slightest harm. The lesson is, Don't probe!—Paris Letter, *N. Y. Med. Journal.*

What to do in Puerperal Eclampsia.—Dr. Clarkson, in the *Virginia Med. Month.*, sums up his views on the treatment of eclampsia as follows: Encourage the attendants. Enforce quiet. Restrain your patient sufficiently to keep her from bodily injury. Place a cork between her teeth. Remembering that the whole surface of the body is in a condition of hyperæsthesia, make as few vaginal examinations as possible. Use the catheter only if there is distension of the bladder. At no time yield to the common suggestion to apply blisters to the nucha, or cataplasms to the calves. Evacuate the bowels by stimulating enemata. If there has been constipation, purge by calomel or croton oil. Apply cold to the head, and remove hair if necessary. Mustard baths to the feet. Do not dash cold water into the face. It may be done in hysteria; in syncope it is undoubtedly beneficial but in eclampsia, Barnes says, "he has seen it provoke a fit, and knows it to be decidedly injurious." Give enemata of chloral and a bromide. Bleed only in decided plethora to relieve cerebral hyperæmia Etherize, but not completely, except during a paroxysm. Keep your hands off your patient, save when necessary to perform some service, and then, if possible, do what is to be done under the cover of anæsthesia. The spasm over, prepare to empty the uterus. Puncture the membranes and leave the rest to nature. If nature refuses to respond, slowly dilate the os. Do not forget that the fingers in cone shape are the best dilators, and chloral their best assistant. Dilatation effected, deliver with the forceps for the head, or, in breech cases, by the feet. The uterus emptied, all unfavorable symptoms will vanish; if not, continue the chloral, the bromides, etc., as needed.—*Med. Rec.*

Horsford's Acid Phosphate in Skin Eruptions and Syphilis.—Speaking of the value of Horsford's acid phosphate, Mr. James Startin, late surgeon, St. John's Hospital for Skin Diseases, London *(Med. Press, Lond.)*, says:

"It appears to me that the "Acid Phosphate" originally prescribed by Prof. Horsford, of Cambridge, U.S.A., is not so well known in this country as its merits deserve. A glance at the formula will, however, readily convince one of its value in suitable cases. Each fluid drachm gives on analysis 5½ grains of free phosphoric acid, and nearly 4 grains of phosphate of lime, magnesia, iron and potash. The following are a few brief notes of some of the cases in which I have prescribed it with complete success.

Mr. G., æt. 69, consulted me in November, 1885, for eczema on the arms, legs, palms of the hands, and trunk. The patient complained of much debility and nervous exhaustion, and he was a man who had led a very busy business life, with much worry. In December, 1885, I prescribed Horsford's acid tonic with much good effect, as in February, 1886, I heard that he was quite well.

Mrs. S., æt. 46, consulted me in December, 1885, for psoriasis, all over the body, more or less, especially on the legs and arms. In January, 1886, I prescribed a teaspoonful of the acid tonic three times a day with marked good effect Patient had been much exhausted by continuous nursing of an invalid mother.

Mr. C., æt. 64, consulted me in September, 1885, with one of the worst attacks of late syphilis I ever saw. After he had been relieved from the distressing symptoms, and ulcerations, I prescribed the acid tonic for epileptiform fits from which he suffered, with excellent results.

Mr. McJ., æt. 63, consulted me in November, 1885, for lichen ruber, which was accompanied with intolerable itching. He was a nervous, irrit-

able man. I prescribed the acid tonic, with the effect that, in December, he presented himself quite convalescent.

TEMPORARY PARALYSIS OF THE RADIAL NERVE IN THE INITIAL STAGE OF LOCOMOTOR ATAXIA.—Prof. A. Strumpell *(Berl. klin. Woch.)* reports an interesting case of this nature. Briefly the history of the case is as follows: B., æt. 55, a waiter, was suddenly seized with paralysis of the left hand. On a Sunday afternoon he was reading a newspaper which he held in his left hand; all of a sudden the paper dropped from his hand and he then learned that he had lost power in it. He had never experienced any pains or abnormal sensations. On examination, it was found that all the muscles supplied by the radial nerve were paralyzed, the sensibility of the forearm and hand was intact, and the electrical excitability of the paralyzed muscles, with both currents, was quite normal. The author found some difficulty in accounting for the paralysis; the most plausible theory was that it was due to alcohol, but its sudden appearance and the absence of pains and other signs of alcoholism strongly opposes that theory. On further examination, however, it was found that the patient had the Argyll-Robertson pupil, the sensibility of the feet and legs was somewhat diminished, and there was absence of the knee-jerk on both sides. On repeated questioning, the patient confessed to having had for some time past "tearing pains" in the legs and a weakness of the bladder. A history of syphilis could not be obtained. Under four weeks' treatment with electricity the paralysis disappeared, without any change, however, in the other tabetic symptoms. [The case is of considerable interest, as bearing upon the recent pathological researches of Pitres and Vaillard on the condition of the peripheral nerves in tabes. In our last report on General Medicine, we gave an abstract of their work in this direction, and we would advise our readers to compare it with the clinical history of Strumpell's case.]—*N. Y. Med. Journal.*

WHAT PROFESSOR HUXLEY THINKS OF MATERIALISM.—Before launching the three torpedoes which have so sadly exploded on board his own ship, Mr. Lilly says that with whatever "rhetorical ornaments I may gild my teaching," it is "materialism." Let me observe, in passing, that rhetorical ornament is not in my way, and that gilding refined gold would, to my mind, be less objectionable than varnishing the fair face of truth with that pestilent cosmetic, rhetoric. If I believed that I had any claim to the title of "materialist," as that term is understood in the language of philosophy and not in that of abuse, I should not attempt to hide it by any sort of gilding. I have not found reason to care much for hard names in the course of the last thirty years, and I am too old to develop a new sensitiveness. But, to repeat what I have more than once taken pains to say in the most unadorned of plain language, I repudiate, as a philosophical error, the doctrine of materialism as I understand it, just as I repudiate the doctrine of spiritualism as Mr. Lilly presents it, and my reason for thus doing is, in both cases, the same; namely, that, whatever their differences, materialists and spiritualists agree in making very positive assertions about matters of which I am certain I know nothing, and about which I believe they are, in truth, just as ignorant. And further, that, even when their assertions are confined to topics which lie within the range of my faculties, they often appear to me to be in the wrong. And there is yet another reason for objecting to be identified with either of these sects; and that is that each is extremely fond of attributing to the other, by way of reproach, conclusions which are the property of neither, though they infallibly flow from the logical development of the first principles of both. Surely a prudent man is not to be reproached because he keeps clear of the squabbles of these philosophical Bianchi and Neri, by refusing to have anything to do with either?—*Popular Science Monthly.*

THE CONTAGIUM OF DIPHTHERIA. — From a number of incidents and cases cited by Dr. Lancry, in a recent thesis on the subject, one fact becomes very evident, and that is, that the spontaneous diffusive power, or what might properly be called the infectiousness of the toxic principle is very feeble. Dumez reports that in a certain communal school under his medical care there were two groups of children studying and playing in the same hall, but separated by an open area a few yards wide, on one side of which were seated the girls and on the other the boys. One of the girls took diphtheria and the disease was communicated to eight of her companions, though not a case occurred among the boys, right across the open aisle. In another school there were nineteen children, seven of whom were in a building in immediate contact with one infected with diphtheria. The balance of the children, twelve in number, were located a few metres away. All of the first group contracted the disease, while all of the second escaped. This fact simplifies the prophylaxis of the disease very materially, and points to the value of rigorous quarantine—a hint emphasized, by the way, by another incident drawn from M. Lancry's thesis, viz.: In one of the hospitals of Paris, the ward for children suffering from porrigo had a playground that adjoined the enclosure in which was the building for the isolation of diphtheritics. While cases of diphtheria became quite frequent among the children who used the playground, scarcely a case occurred in the balance of

the institution. An element of danger disclosed by the researches of Dr. Lancry is the great vitality of the diphtheritic germ. Examples are quoted, on the authority of M. Revilod, of Geneva, where one or more years had elapsed between attacks of diphtheria in the same family, and which were attributed by Revillod to a hereditary tendency to diphtheria; but which Lancry, in the light of his investigations, very properly thinks should rather be attributed to the vitality of the infection of diphtheria.—*St. Louis Med. and Surg. Jour.*

Treatment of Acute Rheumatism.—Prof. Dal Costa states that there are laid down two principal plans of treatment of acute rheumatism:

1. Salicylic acid and the salicylates. These are unquestionably the most speedy remedies, but should not be employed in those cases in which much weakness exists, for it greatly increases the sweats and depression, or in those cases where tendency to cardiac complication is manifested. In these latter it has been stated to be worse than useless.

If the acid be used, which is preferable to its salts, give not less than sixty to ninety grains in twenty-four hours. Ten grains may be given in emulsion for six hours, if borne well, and then the same doses may be given at intervals of two hours.

If the salicylates are used, give three drachms in twenty-four hours. If this plan acts at all, it will do so promptly; and if good results are not achieved by the second or third day, it had better be abandoned.

2. The alkaline plan. This consists in rapid saturation with the alkalies. It lessens the complications, but no good can be achieved by small doses. An ounce to an ounce and a half of either the bicarbonate or acetate of potassium must be given the first twenty-four hours, half as much the following day, and three or four drachms each day thereafter.

Employ until the urine becomes neutral or alkaline, and then diminish the dose as above named.—*Col. and Clin. Rec.*

The Heat Centre.—At the recent session of the Helvetian Society of Natural Sciences, at Geneva, Professor Girard gave an interesting account of some late experiments of his in Schiff's laboratory to ascertain the location of the heat centre. These experiments, which were made on hares, have led him to conclude that the cerebral centre of thermogenesis is the corpus striatum. Every lesion affecting this body in its median part produces a pronounced hyperthermia, which does not result from spasm of the vaso-constrictor nerves of the skin, but from an augmentation of caloric production. Electric excitation of this region, which is followed by a marked augmentation of heat, justifies the assertion that the hyperthermia is a phenomenon of excitation and not of paralysis. Moreover, after puncture and irritation of this region of the cerebrum, there was a considerable increase in the quantity of nitrogen excreted in the urine, indicating an increase of the organic combustions; this was accompanied by notable emaciation of the animal. Girard considers the thermogenetic centres as including not only this median portion of the striate body on both sides, but all the subjacent parts to the base of the brain. There is here, according to him, an apparatus whose excitation increases the production of animal heat, and which probably concurs under physiological conditions to regulate heat productions. In answer to the question, "Is the artificial hyperthermia thus obtained identical with fever? he answers, "No." Augmented heat production and diminished heat emission, such, in his view, are the two necessary factors of that pathological calefaction which constitutes fever. But the last of these factors was wanting in his experiment.—*Boston Med. and Surg. Jour.*

Skin-Absorption.—Dr. Peter F. Fedoroff has made fifteen experiments on three men and three women, to settle the question as to whether the intact human skin can absorb solid medicaments from solutions applied by means of an atomiser. To guard against any possibility of inhalation of the drug, the patient, in each case, was stripped to a certain part of the thigh, placed on an easy chair, and his or her legs passed through a hole in a door, so that the patient was in one room and the legs in another; all holes and cracks in the door were then hermetically sealed. Before operation the legs were washed with warm soap and water, and after operation they were carefully washed and dried (not rubbed) with a hygroscopic towel. A steam atomiser was used and kept at such a distance as gave the greatest strength of jet. A quart of solution was pulverized on each occasion, the time employed being 50 minutes to 2 hours. In ten cases a 3 to 15% solution of pot. iod. was used; in the remaining 5, a 6 to 12% solution of hydro-chlorate of lithium. After each experiment the writer collected the urine voided during the next 24 hours, and in no case was a trace of iodine or lithium ever found.—*N. Y. Med. Abstract.*

Simple Test for Wall-Paper.—A simple and easily-applied test for wall-papers has been devised by Mr. F F. Grenstted. No apparatus is needed beyond an ordinary gas-jet, which is turned down to quite a pin-point, until the flame is wholly blue; when this has been done, a strip of the paper suppected to contain arsenic is cut one-sixteenth of an inch wide, and an inch or two long. Directly the

edge of this paper is brought into contact with the outer edge of the gas flame a grey coloration, due to arsenic, will be seen in the flame (test No. 1.) The paper is burned a little, and the fumes that are given off will be found to have a strong, garlic like odor, due to the vapor of arsenic acid (test No. 2). Take the paper away from the flame and look at the charred end—the carbon will be colored a bronze-red, this is a copper reduced by the carbon (test No. 3); being now away from the flame in a fine state of division, the copper is slightly oxydized by the air, and on placing the charred end a second time, not too far into the flame, the flame will now be colored green by copper (test No. 4). By this simple means it is possible to form an opinion, without apparatus and without leaving the room, as to whether any wall-paper contains arsenic, for copper arseniate is commonly used in preparing wall-papers. Tests 1 and 2 would be yielded by any paper containing arsenic in considerable quantities.—*Brit. Med. Jour.*

TANNIN IN PHTHISIS.—French physicians have been experimenting upon rabbits, in order to discover some substance which would render them insusceptible to inoculations of tuberculous matter. They found tannin to act in the manner desired. Six rabbits were treated for a month with doses of tannin varying from fifty centigrams to one gram. Two inoculations were then made, one with lung tissue from a patient who had died of acute tuberculosis, the other with miliary tubercle from a hospital patient. No trace of infection followed, while three other rabbits, to which tannin had not been given, died in consequence of inoculations with the same material. Upon this suggestion, over fifty cases of phthisis have been treated by giving tannin in doses of from two to four grams daily; and improvement was perceptible in two weeks, the patients increasing in weight. The final judgment upon this plan of affording resistance to the action of tubercular virus, is anxiously awaited.—*Pop. Science News.*

EFFECTS OF PROLONGED LACTATION UPON THE OVARIES AND UTERUS. — Japp. Sinclair presents the following conclusions, based upon the study of a large number of cases of prolonged lactation:

1. Lactation tends to prevent conception by retarding the return of the ovaries to a condition in which ovulation is perfect.

2. After weaning, the evolution of the ovaries is much more rapid than during lactation.

3. The abrupt cessation of a prolonged lactation may be followed by an evolution of the ovaries and uterus so rapid as to induce symptoms of ovarian and uterine hyperæmia.

4. Prolonged lactation may produce a superinvolution of ovaries and uterus, and under favoring circumstances a prolapse of the latter organ.—*Revue Medicale.*

THE FILIFORM BOUGIE.—A correspondent of the *Atlantic Medical and Surgical Journal*, writing from New York, says: "The most simple application of common sense is in the little instrument known as Banks' filiform bougie. We all can recall times when we have worried for days, trying to dilate an old, inveterate stricture, when we have taxed our ingenuity and the patient's patience, trying all the means of our command, and making but little satisfactory progress. I well recall one case in which it took me three days to get down three ordinary filiform bougies, putting in one and leaving it fifteen or twenty hours, and then passing another down beside it, and so on till I could get in a small steel sound, and thus I was three weeks accomplishing what I could now accomplish, with Banks' filiform, in thirty minutes. Banks' filiform and cocaine now are masters of the situation in most strictures. The only surprising thing about these filiform is that we didn't think of the same thing a hundred years ago."—*Med Rec.*

TREATMENT OF DIPHTHERIA.—Dr. F. B. Drescher informs us that he has made use of the following treatment in diphtheria with marked success:

℞—Hydrargyri bichloridi, . . gr. ½
Spts. frumenti, ... ℥ j.
Syr. simplicis, ... ℥ j.—M.

SIG.—Teaspoonful every 3 hours, night and day.

℞—Liq. ferri subsulphatis, . . ℥ ij.
Glycerine, ... ℥ ij.—M.

SIG.—Brush throat once or twice a day.

℞—Tr. ferri chloridi, ... ℥ ij.
Potassii chloratis, ... ℥ j.
Glycerini, ... ℥ iss.
Aquæ cinnamomi, q s. ad. ℥ iij.—M.

SIG.—Teaspoonful in teaspoonful of water every 3 hours, night and day.

—*Am. Med. Digest.*

LOCAL REMEDY FOR NEURALGIA.—A mixture of one part of iodoform, to ten or fifteen of collodion, if spread repeatedly upon a neuralgic surface until it attains a thickness of one to two millimetres, is said to be quite effective in the treatment of certain neuralgias. If the first application does not speedily terminate the neuralgia, those who have used this mode of treatment direct that its application should be continued. It seems especially valuable in the relief of neuralgias of the trigeminus. It also seems of value to be applied along the spine, particularly at painful points in what is called spinal irritation. These observations are by no means new, and yet they seem worthy of further consideration.—*Neurological Review.*

Consanguinity and Mental Unsoundness.—From the physician's point of view, the evidence from the animal world is important. Here there is almost consensus, that, while the effect of "in-and-in breeding" is to intensify *points*, in the long run it is opposed to vigor of constitution. It is to be remembered that every breeder takes care to exclude any animals with any known morbid tendency, while, on the contrary, in the genus Homo, as Dr. Clouston remarks, there seems to be "a special tendency for members of *neurotic* families to intermarry." The result of this will be that in some portions of the population the offspring of such marriage will show the evil results of it to an unusual extent. And thus we find, that in rural and especially in mountainous districts, where the population is small and fixed, the comparative amount of idiocy is greater than elsewhere. Statistical information is inadequate on the subject; the motion to include it in the census returns of England was rejected "amidst the scornful laughter of the House, on the ground that the idle curiosity of speculative philosophers was not to be gratified." In France the returns had given rise to various estimates (varying from $\frac{9}{10}$ to $2\frac{1}{2}$ or 3 per cent.) of the frequency of consanguineous marriages. Mr. G. H. Darwin came to the conclusion that in London $1\frac{1}{2}$ per cent. of all marriages were between first-cousins, in urban districts 2 per cent., and in rural districts $2\frac{1}{2}$ per cent.

If, now, we ascertain the ratio of idiots and insane patients that are the offspring of such marriages to the total number of patients in the asylums, we will have some means of estimating the results of consanguinity. From quite an extended series of records, it is concluded that the ratio just referred to in the idiot-asylum is from 3 to 5 per cent: hence "*first-cousin* marriages, at any rate, are to some extent favorable to the production of idiot children." But this conclusion must be tempered by the consideration that in a large amount of such cases of idiocy and imbecility other causes for this condition are present; and this consideration leads Dr. A. Mitchell to the opinion that "under favorable conditions of life the apparent ill effects of consanguineous marriages were frequently almost *nil*, while, if the children were ill fed, badly housed and clothed, the evil might become more marked." From such facts and figures we may conclude that first-cousin marriages should, as a rule, be discouraged; but that, if a close scrutiny reveals no heritable weakness, neurotic or otherwise, the banns need not invariably be forbidden.—*Science.*

Brain Injury in Forceps Delivery.—At a recent meeting of the Edinburgh Medico-Chirurgical Society, Byron Bramwell showed a boy suffering with left hemiplegia, which he attributed to an injury received at birth. The delivery of the patient's mother was tedious, and had been finally effected with the forceps. Since infancy the child had been subject to epileptiform seizures, but at the time of observation there was no mark of injury of the cranium. The surgical aspect of the case involved the question of operative interference, suggested by the fact that the patient could localize a painful point over the motor area of the left arm. The judgment of the Society was adverse to it, and we do not see how it could have been different.

This case, however, is not cited so much on account of its surgical aspects as on account of its bearing upon the question of the effect upon an infant of the compression of the head by the forceps. That decided compression of the child's head often takes place in forceps delivery, in spite of the greatest care on the part of the accoucheur, and notwithstanding the use of the most suitable form of forceps, cannot be doubted, and it would be interesting to have some collection of the proportion of cases in which subsequent manifestations of brain disturbance could be reasonably attributed to the accidents of such delivery.

One of the ablest neurologists of this city entertains the opinion that very many cases of impaired brain function are due to compression at the time of birth; and his opinion seems reasonable enough. The case related by Bramwell is one in point, and others might be cited. Although it is not perfectly clear, it may be, however, that those who think that the remote dangers to the child in forceps delivery are much greater than is generally supposed, may speak more from a general impression than from a careful study of the subject. Still, their views are so plausible *à priori*, that it is desirable that enough evidence be collected to settle the question definitely for the benefit of the many accoucheurs who apply the forceps frequently.—*Medical News.*

Mediæval Nastiness.—We have received a volume which claims to be the *American Homœopathic Pharmacopœia.* It does not appear to be published by the authority of any convention or body of men, and we suppose it to be a private effort to meet a commercial demand. We have been very much amused by noticing in it a survival of mediæval remedies comparable to the survival of the strange gar fish of the Chesapeake which remains as almost the sole representative of the monstrous misshapen ganoid fishes which have been swept out of existence by the successful cataclysms of geologic ages. Thus, in this Homœopathic Parmacopœia urid acid is directed to be prepared from human urine by concentration, or from excrements of serpents; guano is obtained from the accumulated excrement of sea birds; lava from the overflow of Mount Hecla in Iceland. Hippomanes is a glutinous mucous substance sep-

arated from the allantoic fluid or membrane of the pregnant mare, or cow. Lyssin is the dried saliva of the mad dog. Mephitis is the desiccated stinking fluid of the skunk. Psorium is obtained by squeezing the pus from the festering itch eruption of the negro—whilst the dried bodies of the little red lice which render sad the bright summer days of the domestic fly, appear under the more than regal title of Trombidium muscæ domesticæ. Dried fox liver and dried fox lungs, centipedes, wasps, and other things uncanny and unclean seethe and bubble in this witch's cauldron that streams in these later days, not in the darkness of night, but in the full light of a great medical centre.—*Med. News.*

THE MICROCOCCUS OF TUMORS.—The belief that some forms of tumors are caused by micro-organisms has long seemed very plausible, and diligent efforts have been made to discover these. So far, however, among tumors, only the fungus growth known as actinomycosis, a growth presenting some of the clinical appearances of a malignant tumor, has been discovered to be caused by a parasite.

Dr. Luigi Manfredi, while working in the Laboratory of Cantani, at Naples, discovered quite recently a minute organism which possessed extraordinarily specific and virulent properties. It was obtained from the sputum in two cases of pneumonia, each being a sequel of measles, and running a rapid and highly malignant course. The pneumococcus of Friedlander was observed in each case also. The new organism is oval in form, often appears as a diplococcus, and is about 0.5 mm. in diameter. It has a characteristic method of growth, which is described by Manfredi in his original article (*Fortschritt der Med.*, No. 22, 1886).

A large number of inoculation experiments with pure cultures were made upon dogs, rabbits, guinea-pigs, mice, and birds. With the exception of the last named, which seem to die from blood-poisoning, Manfredi found that the micrococcus uniformly caused one and the same pathological condition. This consisted of the deposit of gray, or grayish-yellow, nodules in the parenchyma of organs, especially of the spleen and lymph gland. The lungs showed in addition the characteristic marks of a more or less intense pneumonia. The nodular masses belong to the type of the granulomata, or infectious granulation tumors. They consist of masses of newly formed cells without blood-vessels, and they begin gradually to become cheesy, to soften in the centre.

The infective granulomata include tubercle, lupus, syphilis, glanders and farcy, leprosy, and actinomycosis. The parasite described by Manfredi produces pathological changes somewhat similar to those of the diseases of the class mentioned. —*Med. Record.*

AN ANATOMIST TO HIS LADY LOVE.

I list as thy heart and ascending aorta
Their volumes of valvular harmony pour ;
And my soul from that muscular music has caught a
New life 'mid its anatomical lore.

O, rare is the sound when thy ventricles throb
In a systolic symphony measured and slow ;
While the auricles answer with rythmical sob,
As they murmur a melody wondrously low !

O, thy cornea, love, has the radiant light
Of the sparkle that laughs in the icicle's' sheen !
And thy crystal.ine lens, like a diamond bright,
Through the quivering frame of thine iris is seen !

And the retina, spreading its lustre of pearl,
Like the far away nebula, distantly gleams
From the vault of black cellular mirrors that hurl
From their hexagon angles the silvery beams.

Ah, the flash of those orbs is enslaving me still,
As they roll 'neath the palpebræ, dimly translucent,
Obeying, in silence, the magical will
Of the oculo motor—pathetic—abducent.

O, sweet is the voice, as it sighingly swells
From the daintily-quivering chordæ vocales ;
Or rings in clear tones through the echoing cells
Of the antrum, the ethmoid, and sinus frontales.

—*Med. Advocate.*

PAINLESS SUTURE.—To avoid the pits and creases caused by sutures in wounds of the face, cut two pieces of adhesive plaster somewhat longer than the wound and an inch and a half wide. They should be shaped so that one edge of each will follow the course of the lesion, but if the wound be irregular it is better to use more pieces. Turn the inner edge (or that intended to be next the wound) of each of these strips under, so as to form a non-adhesive border a quarter of an inch wide, and leave an adhesive surface of from three-quarters of an inch to one inch in width. Apply these to the uninjured skin on each side of the wound, and make them adhere firmly by holding them to this with a hot, dry towel. The stitches may now be taken from side to side, thrusting the needle through the double edge of the plaster instead of through the skin, and after the fashion of shoe-lacing, uninterrupted.—F. L. T., *St. Louis Med. and Surg. Jour.*

DANGER OF WATER GAS.—The experience of the people of Troy in the use of water-fuel gas, shows that, unless this gas is made odorous, so that its presence in the air can be ascertained by the sense of smell, its manufacture and delivery in a city may largely increase the death-rate. Water gas having no odor, and being very deadly, may be as fatal to a man who is awake as illuminating gas is to a man who is sleeping in a close room. This gas is an excellent fuel, and it is cheap. In Troy it was made for nine cents a thousand and sold for fifty cents.

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MEDICAL SCHOOL AMALGAMATION.

An effort has recently been made, by a few individuals connected with one of the medical schools in this city and certain members of the Senate of Toronto University, to organize a medical school in more immediate relation to the Toronto University, by the amalgamation of the two affiliated schools now in existence in this city. A report emanating from the Senate of the Toronto University at its last meeting, recommended the advisability of establishing a school in connection with the University, and a committee was appointed to confer with the authorities of the two medical schools with the view of giving effect to the recommendation.

The question of the amalgamation of the two medical schools in this city is not a new one. It has been discussed again and again for several years past, but has not yet found favor among those immediately interested, for various reasons. Each school has been content to work along in its own way, feeling that nothing was to be gained, under existing circumstances, by amalgamation. Being supported entirely by the fees from students, the one having the greater number had certainly nothing to gain financially by joining the other. The greater number of professors in one school as compared with the other; the rivalry as to the deanship of the united schools; the want of accommodation in the present lecture rooms for the united classes, and last but not least, the great certainty of the immediate establishment of another school—had a deterring influence in the consideration of the question of amalgamation. There is no power to stop the multiplication of schools. The days of monopoly are forever past and gone. Even the proposed scheme, no matter upon what basis it is placed, will not, and cannot prevent the establishment of other schools.

There is much to be said in favor of the present system of competitive schools: such as the stimulus of healthy rivalry, the value of keen competition, the desire to be first in point of efficiency and thorough training, the praiseworthy effort to turn out the best men, etc., and the success of the schools in the past under this system is a sufficient answer to those who are desirous of a change. It must be remembered, also, that in medicine at least, the multiplication of schools does not and cannot lead to the lowering of the standard of medical education, because the Ontario Medical Council lays down the standard and the schools must keep up to it, or fall off altogether. Besides, all candidates in medicine who desire to practise in Ontario, must pass the examining board of the Ontario Medical Council, no matter what their attainments may be, so that the public is fully protected, and if on examination the standard is found to be too low, it can easily be raised from time to time, in accordance with the advancing progress of medicine.

If, however, it is considered desirable, in the interests of the profession and the public, to have one medical school in the city of Toronto, then let us have one on a grand and comprehensive scale, one that will give great promise for the future, and one that will forever place the professors in a position of independence—both as to the number of students in the classes, and the necessity of engaging so largely in private practice. We are in favor of amalgamation, if thereby we can obtain such results. But it must not be forgotten that the establishment of such a school requires money—a considerable sum—to carry it to a successful issue, and unless this is secured, it is needless to expect any great change in the present system of medical education. The present schools are not willing to unite and carry on a large establishment without any assistance other than the fees to be derived from the students. They could not do so without loss to their present incomes, and would

be under the necessity of engaging more extensively in private practice, than many of them do now. Hence, so far from being a success, such a union would be a comparative failure. In fact, the schools are not foolish enough to make the experiment. The senior professors have labored for years to acquire their present position and emoluments, and they will not readily relinquish anything of their hard-earned advantages, unless sufficient guarantees are forthcoming not only to secure them in the undisturbed possession of their respective chairs, but also adequate remuneration for their services, and provision for the payment of retiring allowances when they become incapacitated by age or infirmity.

In the carrying out of any great scheme, the fundamental consideration must always be the financial one, and here it is not less important than in any other. If a great medical school has become a necessity, it must be endowed, or supported by the Government—public funds must be forthcoming to sustain it. Hitherto medical education has been left to take care of itself, and no one can say that either the public or the profession has suffered greatly. In fact, it is said on the contrary, that the public is too well supplied, that there are too many doctors. It is not claimed, be it remembered, nor can it be truthfully asserted, that the doctors are not properly qualified. Their great success, both at home and abroad, gives the most complete refutation of any such assertion. If the promoters of the scheme are sincere, let them at once seek to raise the necessary funds for its accomplishment. It is utterly useless, nay, childish, to formulate a scheme which may be satisfactory to their own minds, and call upon the medical faculties of the two schools to come forward and voluntarily sacrifice the earnings of a life-long labor to carry it into effect.

NORMAL POSITION OF THE UTERUS.

For many years a great deal of attention has been devoted to the rectification and treatment of the various alleged mal-positions of the womb. While much knowledge has been acquired, better treatment secured, and many of the then thought incurable uterine troubles of an earlier period, made amenable to successful treatment in our day, yet we fear there is a strong tendency to over-estimate the pathological effects on the system, of the so-called uterine displacements. Some danger exists, that other causes of uterine pelvic, or other diseases may be overlooked, by the prevailing tendency to convict the uterus on insufficient evidence, to which it might often justly plead "not guilty." The temptation to ascribe many of the ills to which female flesh is heir, to dislocation of the womb is powerful. It lets the careless or ignorant Dr. out of many difficulties; it obviates the necessity for further thought or investigation, and is usually, for a time at least, quite satisfactory to the patient and her friends. But is this creditable to the Dr. or the profession, or just to those who seek relief at our hands?

That such a tendency prevails at least among the less painstaking and conscientious, cannot be questioned, and that many of those, who deem their whole duty done, when they, from a very brief examination, confidently pronounce the disease to be caused by ante-version, ante-flexion, retro-flexion or version, procidentia, etc., etc., might possibly find some difficulty in describing or defining the normal position of the uterus in any particular individual.

As healthy women, and especially virgins, are seldom examined during life at least, most physicians must acquire such knowledge as they possess from description, and from examinations made upon women suffering from pelvic troubles, or when the uterus is greatly modified in shape and position by pregnancy. The few healthy women, whom we may have had the privilege of examining, must almost necessarily have been mothers, therefore we can only be somewhat familiar with the normal position of the uterus in parous women.

The position naturally occupied by the uterus in the majority of cases is in, or nearly in the long axis of the pelvis, and so high that no part of the surface of the body can be reached either anteriorly or posteriorly by the finger in the vagina. In shape it is usually either straight or slightly concave anteriorly. When the uterus is so far inclined forward that the anterior surface of the body can be explored by the finger, it is called ante-flexion or ante-version, and when the posterior surface can be examined in a similar manner it is retro-flexion or version. But a more correct definition of the shape and position of the womb would be any position which is found consistent with health. Each

of these deviations has been found in healthy women, who were free from any discomfort therefrom, and each has been described by some writers as the normal one. We must not forget that much variation obtains, consistent with health, in various individuals, and also in the same individual at different times, not only in anterior, posterior and lateral positions as well as in elevation and depression, but also in shape and size. In virgins the uterus may be straight or bent forward to a degree that an acute angle is formed, and even so far that the body and cervix become nearly parallel. Yet any of these shapes may be normal, that is, consistent with health, and painless functional activity. The effect of pregnancy and child-bearing is to straighten out these flexions. Bandl says: "In living women the phenomenon of ante-flexion or ante-version, is one so common, that one might say without gross error, that all women in whom the uterus is not in a condition of retro version or retro-flexion, present ante-version or ante-flexion more or less pronounced." Again, the uterus in various women may be firm or soft, dense or yielding, and possess different degrees of flexibility, and freedom of movement, without indicating disease in any way. It is not therefore more than probable that many women are suffering from the disagreeable inconvenience, discomfort and even distress of wearing one of the many mechanical contrivances for rectifying the alleged malposition of the uterus, for worse than no purpose, because of the prevailing fashion, while the real cause of their trouble is left to nature, or possibly aggravated by the very means used to remove the erroneously supposed cause.

We willingly admit that a properly selected and adjusted pessary, in some instances, does afford support to some forms of dislocation and relieve the distress therefrom. But we apprehend that a large majority of pelvic troubles for which mechanical appliances are employed are not caused by displacement, and therefore cannot be remedied by such means, and may be aggravated by their employment, especially by inexperienced and unskilful hands.

THE LEGITIMATE BUSINESS OF DRUGGISTS.

The doctor who, either from choice or necessity, dispenses his own medicines has the pleasing assurance that he knows what his patients are taking, and if the remedies do not act as he expects they will, he can blame no one but himself. But in our cities and larger towns, most medical men now depend upon some druggist or druggists to supply the medicines which are prescribed. True, even in large cities and towns, some doctors have private dispensaries and apparently make them pay, but the great majority simply write prescriptions and consequently chemists flourish. Now if said chemists kept strictly to the prescriptions, this system would possess many advantages, too obvious to need mentioning, and neither patient nor physician would suffer, as undoubtedly both sometimes do now. It seems a sweeping assertion to make, but we believe it to be true, that substitution of drugs obtains largely in many chemist shops. An article went the rounds of the medical journals a short time ago, in which was copied the advertisement of a firm of chemists who had the audacity to state openly that they would see that all remedies put up were so combined that they should be most certain to act in the most beneficial way for the patient, thus bare-facedly ignoring the physician's instructions as to what remedies his patient should have. This is an extreme case, and most dispensers would undoubtedly keep the matter of substitution a secret, but it shows to what length men's audacity will carry them. Not content with counter prescribing they even presume to tamper with the treatment laid down by the physician who is alone responsible for the result. In a late editorial in the *St. Louis Medical and Surgical Journal* it is asserted that this practise has done much to force practitioners into prescribing proprietary medicines of known value and purity. We believe this is true, but the editor goes on to say that even these proprietary medicines are tampered with by various manufacturing houses, and that the "substituting druggist laughs at the wrappers and unique designs, at signatures and brands," with the result that the original manufacturer gets the blame for allowing his preparations to deteriorate, and suffers the loss which is certain to attend such deterioration. Comment on such fraud, whether it be in putting in low priced drugs for expensive ones, or of manufacturing unworthy compounds to take the place of those of known value, is surely unnecessary. We make these remarks to call the attention of the profession to the necessity of watching closely any such

attempts at fraud on the part dispensing chemists. The honest dispenser also should take every opportunity of exposing the tricks of those known to practise this deceit, and they will gain the confidence of physicians to whom they are known, as well as confer a material benefit on the public at large. The practice of counter prescribing is one also which calls for concerted action on the part of the profession, for it has grown to gigantic proportions. The number of cases of gonorrhœa, for instance, which are treated by regular practitioners must be small, compared with the number treated by druggists, and so with many minor complaints such as coughs, scabies, ringworm, etc. We owe it to ourselves to bring such druggists to a due sense of their legitimate function, by sending our patients to shops where such practices are not allowed.

BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.

We are glad to notice that a branch of the British Medical Association is about to be formed at Halifax. The profession in Canada has been slow to avail itself of the advantages offered by such organization. Australia has three branches, Jamaica one, Madras one, British Guiana one, while there is an immediate prospect of branches being formed at Ceylon, Cape Town, and St. John's. Of course the membership of the Association can always be obtained direct, on application, suitably endorsed, to the Council of the Association, London, by any properly qualified medical man. This qualification consists in being legally entitled to practise in the colony where the applicant may reside, irrespective of diplomas from licensing bodies in the United Kingdom. But such isolated membership can not be of great value to practitioners, and it is with the view to offering to the profession an opportunity to participate more fully in the benefits which the mother Association confers upon its members that these branches have been instituted. This plan of uniting the medical forces of all English speaking countries is a grand one, and must, we think, result in the advancement of the science of medicine and surgery, as well as the lower interests of the medical world. As the journal of the Association puts it :—"It creates in every district an ethical tribunal, a scientific society and a medico-political organization of which the advantages are at least as great in the colonies as they are in the heart of England." These advantages are many, but among the most important we may mention the influence of the parent association in the decision of all questions, social and ethical not only as affecting individuals, but "in appeals, addressed to Municipalities, Governments and States," this influence being "always at the command of any of the branches in response to every legitimate appeal." It is to be desired, now that our Eastern brethren have taken the initiative, that branches shall be established in the Westerly portions of the Dominion.

THE CLINICAL SIGNIFICANCE OF ENDOCARDIAL MURMURS.—In a report of the proceedings of the Medical Society of the State of New York, the *Medical Record* gives the following propositions and conclusions, from a paper on the above subject, by Dr. Wesley M. Carpenter :

Propositions : 1. The only definite relation between endocardial murmurs and valvular diseases of the heart is that of determining exactly where the lesion exists. Even this has limitations. 2. Clinical studies and pathological observations have determined that no definite ratio exists between endocardial murmurs and the amount and gravity of valvular disease. A very loud murmur may accompany a very small amount of disease, and, *per contra*, extensive valvular and organic disease of the heart may exist unaccompanied by any cardiac murmur. 3. Endocardial murmurs, when present, enable us, as a rule, to ascertain definitely which auriculo-ventricular opening is involved. They may indicate the amount of damage which the valves have sustained.

Conclusions : 1. That endocardial murmurs and chronic valvular disease of the heart are not synonymous terms.

2. That the existence of a persistent endocardial murmur is not inconsistent with long life and the enjoyment of a fair degree of health.

3. That the knowledge, on the part of the patient, of the presence of an endocardial murmur should guard him against exposure to all influences that may give rise to any of the diseases which are liable to have cardiac disease as a sequel, or that will cause increased cardiac action.

In the discussion which followed Dr. Loomis said that he never mentioned to the patient the fact that a cardiac murmur existed, until evidence of degeneration of the cardiac walls was made out, but that then he explained to him the exact condition present.

ALBUMINURIA NOT NECESSARILY DANGEROUS TO LIFE.—Dr. Grainger Stewart in *The Am. Jour. of Med. Sciences*, mentions four kinds of albuminuria which may occur without giving rise to alarm, viz.: 1. Paroxysmal albuminuria; 2. Dietetic albuminuria; 3. Albuminuria from muscular exertion; 4. Simple persistent albuminuria. In the first class the albumen appears suddenly and in large quantities, with numerous casts, but lasts a very short time. These symptoms may or may not recur. As to the treatment of this variety the kidneys should be guarded against irritation, and the hepatic function carefully attended to. He has never known serious results to follow this form. The second form is better known, and requires the avoidance of whatever article of diet is found to induce the condition. The third form is best treated by rest, careful diet, and general tonic measures. In the fourth variety, there is a persistent loss of albumen, small in quantity, without casts, or any of the attendant symptoms of organic renal disease. This condition may continue for years, and diet and exercise seem to have no perceptible influence on its course.

ONTARIO MEDICAL ASSOCIATION.—This year the meeting of the Association is to be held in Toronto, and promises to be most interesting, not only in regard to the various papers which our own talent so abundantly furnishes, but also as to the list of invited guests who have promised papers on interesting subjects. Dr. Wyeth, Prof. of Surgery, Polyclinic, New York, has promised a paper on "Osteo-plastic operations on the foot," and Dr. Satterthwaite, Prof. of Pathology, New York Post Graduate School, on the "So-called uric acid diathesis" Prof. Packard, of Philadelphia, has also promised a paper, and no doubt there will be others before the time of meeting, which this year comes on the 8th of June. Dr. Arnott, of London, opens the discussion on Medicine by a paper on "Phosphaturia." Dr. W. T. Aikins opens the discussion on Surgery, and Dr. Taylor, of Goderich, on Obstetrics—"The functional paralysis of pregnancy."

CURE FOR WARTS.—*The Medical Press* says it has been now fairly demonstrated that these unsightly growths, may be cured by small doses of Epsom Salts, taken internally. Several children have been cured by 3 grain doses, taken morning and evening, and other cases in adults are reported as cured by the administration of from 10 grains to a drachm and a-half daily. When these excrescences occur on the face, such medication would certainly commend itself in preference to the old fashioned practice of removing them by caustics.

DATES OF MEETING OF IMPORTANT MEDICAL SOCIETIES.—The largest and most important meeting this side the Atlantic will this year be the "International Medical Congress," which meets in Washington on the 5th of September. The "British Medical Association" meets in Dublin on the 1st of August; the American Medical Association, in Chicago, on the 7th of June; the Canadian Medical Association, in Hamilton, on the week following the meeting of Congress in Washington, and the Ontario Medical Association, in Toronto, on the 8th and 9th of June. Our readers will please note the above for future reference.

ACUTE BRONCHITIS.—Muirhead (Ed. Med. Jour.) gives the following in the preëxudative period of acute bronchitis:

℞	Vin. antimon	℥iii.
	Lig. potassæ	℥ii.
	Lig. amm. acet.	℥iij.
	Syr. aurant	℥ip.
	Aquam	℥vi, M.

S. ℥ss. in water every 3 hours.

A GOOD IDEA.—Dr. Jones at a recent meeting of the Ohio State Board of Health, introduced a resolution, requiring that every railroad company doing business in that State shall be required to carry an emergency case containing necessary appliances in cases of accidents, and that the employes of the road shall have instruction in their use given them by the company's surgeon.

ARMY MEDICAL SCHOOL, NETLEY.—The friends of Dr. B. H. Scott (Trin.) will be pleased to learn that he has successfully passed his examination for entrance into the army. He received "honorable mention," standing third on the list, having gained 731 marks out of a maximum of 900.

DETECTION OF BLOOD-SPOTS ON IRON.—Dr. Daunenberg says that if the spots be loosened by a few drops of a 10% solution of caustic potash, scraped off and treated with ammonium sulphide and water, beautiful rhombic crystals will be formed. He calls them "Hæmidin" crystals and considers them conclusive proof of the existence of blood in the stain.

WESTERN UNIVERSITY MEDICAL COLLEGE.—The following is a list of the successful candidates in the recent examination in that school: R. S. Smith, *Gold Medalist;* C. D. McDonald, *Silver Medalist*, J. Proudfoot, *3rd Year Scholarship;* C. A. Cline, *2nd Year Scholarship;* A. Reid, *1st Year Scholarship*. Degree of M.D.: R. S. Smith, J. D. Balfour, C. D. McDonald and J. Haggart.

KINGSTON MEDICAL COLLEGE.—The following are the successful candidates in the recent examinations. M.D., C.M.—A. G. Allen, J. J. Anderson, J. V. Anglin, W. C. Beaman, J. W. Begg, Ella Blaylock, D. Cameron, A. J. Errett, A. G. Ferguson, A. J. Fisher, A. E. Freeman, Ada A. Funnell, M. Gallagher, A. Gibson, J. F. Hart, M. W. Hart, J. E. Hislop, M. James, Miss Livingston, E. McEwen, J. E. Mabee, M. Mabee, W. D. Neish, A. F. Pirie, W. Ranstead, T. Scales, S. H. Thorne, A. F. Warner and Dr. Dunlop.

BRITISH DIPLOMAS.—The following Canadians have passed the Triple qualification, Edinburgh: J. C. Carlyle, F. Primrose, R. C. Coatsworth, J. G. Morrison. Dr. I. S. Freeborn, Victoria, has obtained the license of the K. & Q. C. P. I. to practice medicine.

CORONERS.—Dr. Youker, of Belleville, and Dr. Giles, of Haliburton, have been appointed associate coroners for the Counties of Hastings and Haliburton, Ont., respectively.

THIRST IN DIABETES.—Duchenne recommends *(Nouveaux Remèdes)*, the administration three times a day, of a drachm of a solution of potassæ phosphas 2 parts in 75 parts of water. It is best given in a little wine or hot tea.

WE are pleased to notice that Dr. Baxter has been elected to the office of Speaker of the Ontario Legislature. This mark of distinction will be gratifying to the profession at large, for while we have always a good representation in Parliament, the places of honor have mostly fallen to the law.

WE are pleased to notice that Dr. Wm. Gardner, of Montreal, has been elected a vice-president of the Brit. Gynæcological Society.

The Council of the Royal College of Surgeons of England, has expelled a member for advertising in the secular papers.

"Medical Notes" in this issue and the last should have been credited to *Col. & Clin Record*, Philadelphia.

We regret to announce the death of Prof. Arlt, of Vienna, at the ripe age of 75 years.

PROF. CARL SCHRŒDER, of Berlin, is dead.

MICHAEL BARRETT, M.A., M.D.

The death of Dr. Barrett, on the 26th ult., was very sudden and unexpected. Although about 71 years of age, he appeared to be in the enjoyment of good health, and was in the regular discharge of his duties on the day of his death. Dr. Barrett was born in London, Eng., and received his early education in Caen, France. He came to Canada in 1833 and was engaged in various pursuits until 1837. At the time of the rebellion he was connected with the "Queen's Rangers." After the close of the rebellion he went south for a few years, and on his return he was appointed English master of Upper Canada College, a position which he held upwards of thirty years. During the early period of his incumbency he availed himself of the opportunity of taking a course in Arts and Medicine in Toronto University. He was subsequently appointed a professor in Rolph's school, but at the time of the disruption he joined his fortunes with the Toronto School of Medicine, in which school he held the position of Prof. of Physiology up to the time of his death. He also lectured in the Veterinary College, and was president and one of the principal promoters of the Woman's Medical College, Toronto. He was examiner in chemistry and chairman of the board of examiners of the Ontario Medical Council, having been elected to the latter position for three or four years in succession.

Dr. Barrett's life was almost wholly spent as a teacher and lecturer in the schools and colleges of

this city above referred to. He never engaged in practice nor identified himself directly with the profession of which he was an ornament, but he was in active sympathy with everything which tended to advance its best interests. He was possessed of more than ordinary intellectual attainments, a thorough gentleman and highly esteemed by all classes of the community. His loss will be deeply felt by all who knew him intimately. His funeral was largely attended by professors and students of all the schools, the members of the profession and the general public. His wife died only a short time ago. The family have our deepest sympathy in their affliction.

Books and Pamphlets.

A Text-book on Surgery. General, Operative, and Mechanical. By J. A. Wyeth, M.D., Prof. of Surgery, N. Y. Polyclinic. New York: D. Appleton & Co., 1887.

To many Canadians who have visited New York, this new candidate for the commendation of the lecturer, and the approbation of the student and the practitioner, will recall pleasant recollections of its author. They will remember that as demonstrator of Anatomy, at Bellevue, a dozen or more years ago, he used to dissect rapidly and accurately *before the class*, the subjects used to illustrate Dr. Crosby's lectures. The fame he has won since then by his original investigations in regard to the surgical anatomy of certain arteries they will not have forgotten. As secretary of and a moving spirit in the N. Y. Polyclinic, he has contributed in no small degree to the success of an institution which has brought over the Atlantic for us those peculiar methods of teaching which have made Vienna famous the world over. He has also as President of the N. Y. Path. Soc'y, as Surgeon to Mount Sinai and other hospitals, and as a teacher of operative and clinical surgery done much good work, and has enthused numberless others with his own tireless desire not simply to know and to practise, but also to advance the art of surgery. If it be granted that after such an experience Dr. Wyeth is a fit and proper person to write a text-book on surgery, it may still be asked: "Have we any need for such a work? With Ashhurst, Agnew, Bryant, Erichsen, Gross, Holmes, Hamilton, and Treeves, to choose from, why seek we for another? The best work on surgery for use in student days will, we take it, be one which within the compass of a single volume teaches clearly and attractively the latest certainties of surgical science, bringing out most strongly those things which it is important the memory should retain, and rigidly excluding all extended discussion upon theories just advanced or long exploded, as well as all unimportant details. From the list given above we can, on account of their bulk, exclude the works of Agnew, Erichsen and Gross. Students have no time to master them, and it is better and safer in every way to know a smaller work well than to know something about a large one. Dr. Hamilton's fame rests securely upon his great work on "Fractures and Dislocations," and it has been advanced but little by his general treatise on surgery which took a decade to reach its second edition. As he was out of practice for some years before this last edition was called for, and out of sympathy with many of the more recent advances on surgical practice, his book is not one to which we can assign a first place. After a somewhat close examination of Dr. Wyeth's Text-book we are of opinion that with any of the others named it can hold its own, while in certain particulars it is the undoubted superior of any work hitherto before the profession. Its readers will have nothing derived from its study to unlearn. Its teachings are the accepted ones of to-day, while within its nearly 800 pages we have found but very few superfluous sentences. As in speaking, so in writing, Dr. Wyeth has a way of getting at the pith of a matter, and he wastes no words in stating his conclusions.

Aseptic surgery is taught in such manner as to make the application of its principles easily available in back-woods cabins and in city tenements. No other work extant brings out so clearly the changes which have taken place in this department of surgery within the last ten years. Perhaps the strongest chapter in the book is, as might have been expected, that on the ligation of arteries. Artistically and anatomically the 27 colored plates which illustrate this part are superior to any that have appeared before this in a general treatise. The illustrations in the entire work have cost, we are informed, over $7,000, and they are mostly new or being from recent German sources, will be new to a large proportion of readers here. An interesting cut is that showing the author's case of genu valgum and varus in the same patient straightened by a double osteotomy. Another represents the result obtained by Humphrey's operation, the transplantation of the urethra to

the perineum after amputation of the penis for epithelioma. Of the German cuts or plates some of the best are the illustrations of sections through joints (after Broune), and those (after Socin), in the chapter on genito-urinary diseases. Instead of entering here into any extended review of the work we may at a later date present to our readers certain selections from its pages. In conclusion we may say that the book is characterized throughout by good practical common sense, wide research and excellent judgment as to what should be left out of, as well as what should enter into, a work of this scope. A student who has become thoroughly conversant with it need not fear being ploughed in examinations or tripped in practice, and he will need nothing more than this upon surgery till he ceases to buy text-books and substitutes for them the monograph that now cover every department of surgical science so admirably. The practitioner also who desires to regain touch with those who march in the front rank of surgical teaching, will find that in reading this book he will be able to judge wherein he has lagged behind. The work of the publisher is all that the most exacting could wish for.

Diseases of Women; a Hand-book for Physicians and Students, by Dr. F. Winckel, of Munich. Translated by Dr. Williamson, of Alleghany, under the supervision of Theo. Parvin, M.D., Jefferson College, Philadelphia.

Hand-book of Materia Medica, Pharmacy and Therapeutics, by Samuel O. L. Potter, M.A., M.D., Professor of Medicine, Cooper Medical College, SanFrancisco. Philadelphia: P. Blakiston, Son & Co.

The two volumes before us belong to a series of manuals which the publishers are now presenting to the profession in order to meet what is felt to be a growing want, viz.: A set of text-books that shall be manuals in point of size and yet include all that is likely to be required by students or practitioners. Many of the present text-books are overgrown, and so replete with unnecessary details that they are confusing to the student, points of minor importance being discussed that are of interest only to the specialist. The authors have spared no pains to make the books useful, practical and in every respect thoroughly up to the times; long experience as writers and teachers enabling them to present their subjects clearly and concisely. The success already accorded one or two of the volumes warrants the publishers issuing them at the very low price of $3.00, bound in cloth, and $3.50 in leather; this, other conditions being favorable, will be an argument for their adoption and use. We give here a list of the series now ready: Galabin's Midwifery; Yeo's Manual of Physiology; Goodhart & Starr's Diseases of Children; Waring's Practical Therapeutics; Reese's Medical Jurisprudence and Toxicology, and Richter's Organic Chemistry.

The Past, Present and Future Treatment of Homœopathy, Eclecticism and Kindred Delusions, which may hereafter arise in the medical profession, as viewed from the standpoint of the history of medicine and of personal experience. By Henry I. Bowditch, A.M., M.D., of Boston. Boston: Cupples, Upham & Co.

The pamphlet before us is the printed address of the venerable author delivered before the Rhode Island Medical Society, on its 75th anniversary in June last. After giving reasons for the rise of the sects, he asks, Have we treated these sects wisely? He answers in the negative and quotes a long letter written to him in 1857 by Dr. James Jackson of Boston, at that time the recognized leader of the profession in New England. This letter is a most able and eloquent defence of his own course in his liberal treatment of irregular practitioners, and a vigorous protest against the absurd folly of quarreling with those who hold opposite beliefs to those entertained by the regular profession. Dr. Bowditch endorses this letter and gives the weight of his opinion in favor of consultations with all "legalized medical bodies." "The present hostile attitude of the Old Code Physicians toward the New Code practitioners, because of the opinions of the latter upon the proper treatment of Homœopathists and Eclectics, is equalled in absurdity only by the late trial held at the United States Hotel in Boston to decide whether a man can be allowed to enter upon a devoted Christian missionary life, who admits that, possibly, all unbaptised infants and Heathen men and women, ignorant of Christian "ethics," may have a chance of escaping from pertpetual Hell Fire after leaving this world. The Priest and Physician were in old times united in one person The modern follies of the Orthodox in religion and in medicine seem to point to their common origin."

Births, Marriages and Deaths.

At Kingston, on the 11th ult., the wife of Dr. W. H. Henderson, of a daughter.

On the 5th ult., Dr. O'Sullivan, of Peterboro', Ont., aged 50 years.

On the 22nd of January, W. J. Mitchell, M.D. of Unionville, Ont., aged 41 years.

On the 22nd ult., Dr. F. L. Nesbitt, of Angus, aged 49 years.

THE CANADA LANCET.

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Original Communications.

LAPAROTOMY AND INTESTINAL SUTURE.*

BY JOHN A. WYETH, M.D.,

Professor of Surgery in the New York Polyclinic, Etc.

Leah R.,† Russian, fifty-six years old, housewife, was admitted to Mt. Sinai Hospital on October 9, 1886, with the following history: For ten years she had had a swelling in the left groin, which would disappear when she lay down and return when she was standing erect. She had not worn a truss. Two weeks before admission she discovered that the tumor no longer disappeared upon going to bed, but became painful, tender and more swollen. She had not vomited up to the time of arriving at the hospital, but there had been no evacuation of the bowels for six days prior to her admission.

On admission, a swelling as large as an ordinary fist was found occupying the inner aspect of the left groin and thigh. The skin over the tumor was red in color, tender and doughy to the touch, and fluctuation was evident. The tissues around were slightly emphysematous. The patient's appetite was gone; she was emaciated, having lain in present condition ten days in a tenement-house without proper care. The temperature was normal.

A diagnosis of strangulated femoral hernia was made, ether administered, and the tumor incised. Several ounces of foul pus mixed with intestinal matter were discharged. No trace of a hernial sac or of intestinæ could be discovered, such was the gangrenous condition of the mass. Upon introducing the little finger into the femoral canal, a slight opening into the intestine could be felt. Into this a closed dressing forceps was introduced, and the opening dilated by separating the jaws of the instrument. This was intended to secure the freer exit of ingested matter from the upper portion of the occluded gut.

A loose dressing of iodoform gauze was laid over the wound. The patient improved in condition after this operation, under mild stimulation and liquid diet (milk, beef-tea, beef-juice, whisky, sherry, etc.). Only a small quantity of ingested matter escaped when the gauze dressing was changed on every second or third day.

On October 22d, thirteen days after the first operation, with ether narcosis laparotomy was performed. The patient was placed upon the back with the pelvis elevated upon a firm cushion. With Volkmann's spoon the granulation tissue was first scraped from the walls of the abscess, the hole into the intestine plugged with a pellet of iodoform gauze, the cavity of the abscess irrigated

FIG. 1.—Loop of small intestine. *a b*, lines of section through the gut, removing the gangrenous portion; *b c*, same through the mesentery; *a a*, gangrenous portion of illum; *d d*, occlusion of the afferent and efferent tubes by tape ligatures.

* Read before the Section in Surgery of the New York Academy of Medicine, March 14, 1887.

† I am indebted to Dr. Rich, of the house-staff of Mt. Sinai Hospital, for the notes of this case.

with 1 to 1000 sublimate, and then tightly packed with iodoform gauze.

The integument about the femoral canal was washed thoroughly with soap and warm water, cleanly shaved, washed with ether, and finally with 1 to 1000 sublimate solution. Towels wrung out of hot sublimate solution (1 to 3000) were laid over that portion of the body near the groin, leaving only a spot exposed measuring six by four inches.

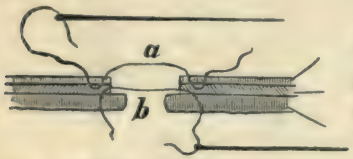

FIG. 2.—Schematic. *a*, Lembert's, and *b*, Czerny's sutures.

An incision four inches in length was made parallel with the outer border of the rectus muscle, the lower end being over the *femoral ring*. All bleeding was arrested, so that before the peritoneum was opened the wound was absolutely dry. Juniperized catgut ligatures were employed. Great care was observed to keep to the inner side of and away from the epigastric vessels, which were exposed in the dissection. The parietal layer of the peritoneum was picked up with a fine forceps, opened, and further divided upon the finger as a director.

Upon looking into the abdominal cavity, one or two loops of normal small intestine were seen, and upon displacing these upward, a third loop was seen to be imprisoned in the femoral opening. That part of this loop above the constriction was slightly distended, while the part on the side nearest the rectum was contracted until it was about two-thirds of the diameter of the upper segment. The obstruction of the intestinal canal at the ring was complete. A soft flat sponge taken from a warm Thiersch solution (boric acid, gr. iv ; salicylic acid, gr. j ; water, ℥ j) was placed beneath the imprisoned loop in such a manner that it held the loose loops of small intestine back, and was ready to receive any foreign matter which might escape from the gut when it was divided.

Two long-jawed scissors-forceps (used as clamps) were then placed so as close the loop of gut which was caught in the ring. One of these rested against the inner surface of the ring and the other only sufficiently removed from this to permit of a division of the intestine between the forceps.

As soon as this was effected, the loose end, with one pair of forceps attached, was brought out through the abdominal wound and placed in a warm Thiersch towel. As the forceps which constricted the ring of gut attached to the femoral canal was removed, a tuft of sponge was tightly packed into this ring to prevent any infection from the abscess with which it communicated.

Of the loop which had been liberated, about ten inches (five above and below the point of occlusion) were drawn out of the abdomen, flat Thiersch sponges carefully placed so as to close the wound and prevent any escape of matter into the peritoneal cavity, and the exposed gut protected by covering with warm towels. A piece of cotton tape one-fourth of an inch wide was then tied four inches above and below the limits of the gangrenous opening, so as to completely occlude the lumen of the gut (*d d*, Fig. 1). These tapes had been well soaked in a 1 to 3000 sublimate solution. When the forceps-clamp was removed, the opening into the intestine was seen to occupy two-thirds of the circumference of the canal. The gut was then cut across at a right angle to its axis by a single stroke with the straight scissors (*a b*, Fig. 1). These lines of section were well out in sound tissue. The piece of intestine removed measured two inches and a half. A triangular piece of the mesentery was also removed (*b c b*, Fig. 1).

The bleeding from the mesentery was profuse, requiring a dozen catgut ligatures. From the ends of the intestine only a slight oozing occurred. The cavity of the gut from the tapes to the openings was carefully emptied of all matter and

FIG. 3.—Schematic. Shewing the inversion of the peritoneal layer by tying Lambert's suture, and of the mucous membrane by Czerny's suture.

washed out with Thiersch's solution. Nothing escaped from the lower end.

The edges of the divided mesentery were first united by eight interrupted catgut sutures, about one-fourth of an inch distant from each other. When the intestine was reached, the mesenteric attachment of each end was carefully brought into apposition and the work of stitching the ends of the cylinders to each other begun.

In doing this, three forms of suture were em-

ployed: 1. A suture through the mucous membrane alone, or *Czerny's suture.* 2. That through the peritoneal coat alone, or *Lembert's suture.* 3. One which pierces the peritoneal coat, and, passing along with the muscular layer, comes out on the free border of the divided gut, the *intermediate suture.**

In Fig. 2, which represents a longitudinal section through the ends to be approximated, is shown at *b* the Czerny suture as it is passed through the mucous layer of the gut from the inner surface of the canal, while at *a* the method of introducing the Lembert suture through the peritoneal layer is shown.

When a gut is cut across, the longitudinal muscular layer retracts, carrying the peritoneal layer with it and leaving the thick mucous membrane projecting about one eighth of an inch. The object of the Czerny suture is to bring the mucous membrane and the connective tissue upon which it rests together, and thus strengthen the line of union after adhesion occurs. If this is not done, the slight adhesion between the peritoneal surfaces obtained by the Lembert suture might give way under the strain of distention of the intestine by gas or ingested matter. The objection to passing a suture entirely through the wall of the gut and thus approximating all the coats at once, is the danger that the perforation may be followed by escape of gas or other contents to either side of

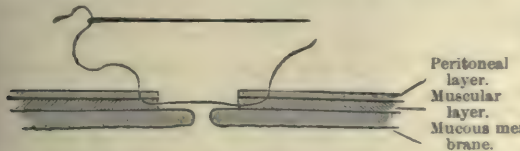

FIG. 4.—Schematic. Showing the route of the intermediate sutures.

the line of adhesion between the ends. The inversion of the mucous membrane by Czerny's suture and of the peritoneal layer by Lembert's suture after the threads are tied is shown in Fig. 3.

The mechanism of the intermediate suture is well shown in Fig. 4. This suture adds strength to the union by taking in the muscular layer and connective tissue of the mucous membrane, together with the peritoneal covering. Applied after the Czerny suture, there can be no danger of escape of intestinal contents through the wound.

In suturing the intestine, the very finest black (iron-dyed) silk, and a delicate, perfectly round needle, should be used. The straight needles are preferable to those which are half or full curved. The thread should be made aseptic in sublimate solution (1 to 3,000), and it and the needle taken from a 1-to-20 carbolic-acid solution as they are used.

In commencing the sutures, first insert one Czerny suture just over the mesenteric or attached border of the intestine, and tie this, the knot, of course, coming within the lumen of the gut. The needle should pass from within through the mucous layer at a distance of about three-sixteenths of an inch from the free border (Fig. 2), out along the border of the same end, and, being carried across to the opposite end, should be made to enter below the muscular and mucous layer, and to emerge through the mucous layer three sixteenths of an inch from its cut edge. A Lembert suture should be next inserted just at the edge of the mesenteric attachment, as follows: * The needle is made to enter the peritoneal coat one-eighth of an inch from the edge, and, passing between the serous and mucous coats, is again brought through the peritoneal layer about one twenty-fifth of an inch from the edge (Fig. 2, *a*). At a point exactly opposite, the same stitch is passed through the peritoneal layer of that side for the same distance, and this thread is tied. In knotting all of these sutures it is a wise precaution to use the *double* or *friction* knot for the first trying, for by so doing

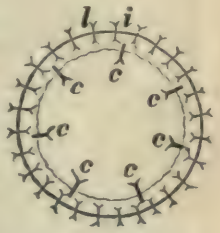

FIG. 5. — Schematic. Section of intestine, showing the proportion of each form of suture, and their distance apart. *l*, Lembert; *i*, intermediate sutures, alternating; *c*, Czerny sutures. (Natural size.)

* Dr. Sutton, of Pittsburg, employed this suture in a case which ended in a good recovery. I saw the line of union in this patient about two years after the operation, through the courtesy of Professor J. B. Hunter, who was performing a second laparotomy.

* When the peritoneal surfaces of the intestine are held in apposition by this suture, adhesion occurs in remarkably short time. In January, 1887, I was called in consultation in a case of suspected volvulus. Upon opening the abdomen, it was found impossible to untwist the loop without puncture and evacuation of the contents of the greatly distended gut. The opening, one fourth of an inch long, was closed by four Lembert sutures at 11.30 a. m. At 3 p. m. the patient died. On autopsy, not only had well-marked adhesion taken place, but the silk threads were with difficulty recognized, being hidden beneath the inflammatory exudation.

there is no danger of the suture slipping and the parts separating as the second turn is being made. A second Lembert suture should now be inserted on the other side of the mesenteric attachment, and an *intermediate* suture passed between these, through the substance of the mesentery and down into the strip of intestine which here is uncovered by peritoneum. Extra care must be taken to see that this part of each end of the cylinder is in perfect coaptation. The sutures are now inserted for the remainder of the apposing surfaces. The Lembert and intermediate sutures alternate through the entire circumference, and should be one-eighth of an inch apart. The mucous or Czerny sutures

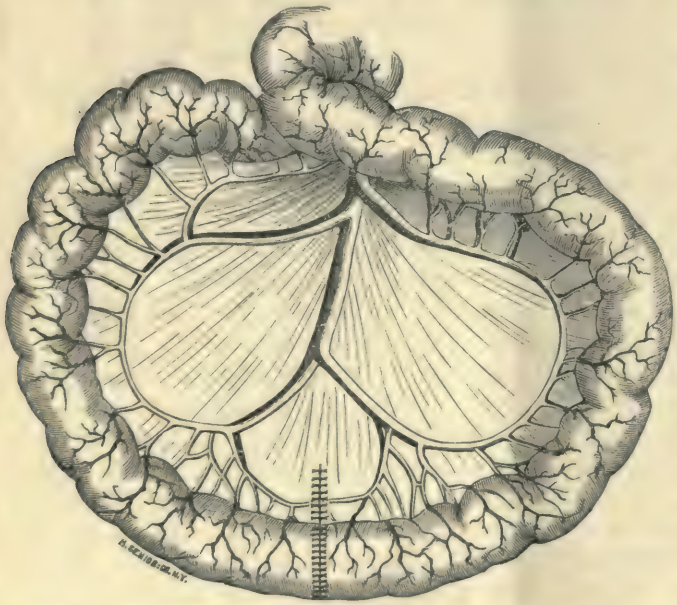

FIG. 6.—Showing the line of sutures in the mesentery and around the intestine.

should be from one-fourth to three-eighths of an inch apart. The relative proportion of these sutures is shown in Fig. 6. It is evident that while the Czerny suture is tied, leaving the knot within the cavity of the intestine for the first part of the operation, the last few threads must be tied leaving the knot imbedded between the mucous and muscular layers of the wall. In applying the sutures the plan followed was first a Czerny, then a Lembert about over this, next an intermediate, another Lembert, and after this a second Czerny suture, and so on. In other words, it was necessary to insert the mucous suture before the superficial sutures had quite reached that point.

All of these threads should be cut off close to the knot.

In this operation I had to leave the space between the sutures on the upper end of the gut a little wider than on the lower, for the diameter of the efferent tube was considerably smaller than that of the afferent portion. The intervening space was a flush one-eighth of an inch on one side and a scant one-eighth of an inch on the other. When the sutures were all in, the constricting tapes were removed. The gut immediately filled with gas. To the surprise of all present, the intestine below the line of suture instantly expanded to a size equal to that of the portion above the line of union. That the wound was tightly closed was demonstrated by forcing the contents of the intestine from opposite directions towards the sutures. No gas escaped.

The appearance after the tapes were removed is shown in Fig. 6. At intervals of about five minutes during the operation, a small quantity of warm Thiersch solution was poured over the exposed intestine. The warm Thiersch towels upon which it rested were changed every ten or fifteen minutes. No fluid was allowed to get into the abdominal cavity. Finally, the intestine was carefully washed with this solution, and returned into the cavity of the peritoneum.

It was now necessary to deal with the ring of intestine which occupied the femoral opening, and which led from the abscess into the abdominal cavity. Two strong silk threads were passed entirely through the opposing walls of this rim of intestine and tied so as to bring the edges well together. I then passed a silver probe from the hernial abscess cavity up through the femoral canal, and through the ring of adhering intestine between the two silk threads, until the end of the probe projected a half-inch into the cavity of the abdomen. The ends of both threads were tied to the probe, and this withdrawn, bringing the sutures out through the saphenous opening. By making strong and continuous traction on these, the mucous membrane was averted, the peritoneal surfaces brought in contact, and the femoral open-

ing closed. This procedure effected a radical cure of the hernia.

The wound in the parietal layer of peritoneum was closed by catgut sutures, introduced as in the Lembert suture. The abdominal incision was closed with silver sutures, which included all the tissues down to (but not touching) the peritoneum. For the prevention of ventral hernia after laparotomy, it is very important to include the fascia and aponeuroses of the muscles in the silver sutures. A Neuber's bone-drain was inserted. The abscess and sinus were packed with iodoformized gauze.

The operation lasted four hours. The patient rallied well, and was kept quiet with suppositories of opium She was kept on the back, and was not permitted to move body, legs, or arms for ten days. The diet was milk, beef-tea, and whiskey in small quantities.

October 23d, 6 A. M., fourteen hours after operation, temperature 99° F. Patient vomited at 4.30 A. M.

24th.—Pulse 120, temperature 99° to 100°.

25th.—Pulse 100, temperature 99·6°. Patient comfortable. Slept well.

26th.—The pulse and temperature were the same.

27th.—Pulse 80 to 100, temperature 98·4° to 99·6°.

28th.—Pulse 100, temperature 99° to 100°.

29th.—Pulse 100 to 106, temperature 99·2°.

On this the sixth day the silk threads came away under the continuous traction of the elastic ligatures attached to them. The wire sutures were also removed. Wound of incision united throughout. Bowels moved ; stool of normal consistence.

30th.—Pulse 94 to 100, temperature 99·2° to 100·2° F. Bowels moved again ; stool normal. Opium discontinued.

The subsequent history contains nothing of interest. The patient steadily gained her strength. On November 20th she sat up in bed, and on December 3d was walking about the ward. She is now fully restored and attending to her duties. There is no sign of obstruction or interference with the functions of the alimentary canal, and the hernia is at this date radically cured. The great emaciation of the patient at the time of the operation, and the fact that within half an inch of the opening into the abdomen there was a large abscess cavity, may be mentioned as the two conditions which rendered the prognosis grave.

The treatment of strangulated hernia with gangrene of the intestine may be considered under three methods :

1. Establishing a permanent fæcal fistula at the seat of gangrene.

2. Immediate exsection of the gangrenous portion of the gut, reunion at the ends by suture, and return of the loop.

3. Temporary fistula, followed, after an interval of some days, by laparotomy, excision, and suture.

To the first method may be consigned subjects so feeble that no operative procedure is justifiable.

As to whether exsection should be made at once or postponed after a free discharge through the fistula has been established, must be determined by the condition of the individual at the time of operation. If the patient is well nourished, and if the anæsthetic is well borne, it will be advisable to relieve the strangulation, and through the hernial opening draw out the gut until five or six inches of sound intestine above and below the gangrenous spot are in sight, remove the dead portion, and unite the ends at once. This is a much simpler operation than when an additional opening through the abdominal wall is required.

In most cases, however, it will be found that the condition of the patient is not favorable for immediate exsection. Shock is almost always severe, and not infrequently fatal, when the constriction has been so severe or lasted long enough to produce gangrene. In such cases the plan carried out in the case just detailed should be followed.

Finally, the subject of intestinal suture is one of such vast importance, that too much stress can not be laid upon the necessity for a thorough preparation for the operation. In the careful application of this procedure to penetrating wounds of the intestines, to exsection of gangrenous portions of the canal as the result of hernia, volvulus, intussusception, and in the removal of malignant neoplasms and strictures, many lives may be saved which, under the teaching of former years, were left to die without surgical interference. The difficulties of the operation are great, and the time required in exsection dangerously long, unless the surgeon has had sufficient practice to enable him to work rapidly and safely. I would advise those who are willing to undertake this procedure to

perfect themselves in the various sutures upon the cadaver, or preferably upon living animals. I was deeply impressed with the importance of this in my own case, for, notwithstanding that I had done this operation upon the cadaver about ten times, four hours were occupied in the case which forms the subject of this paper.

VESICO-VAGINAL FISTULA SUCCESSFULLY TREATED BY "KOLPO-KLEISIS."

BY N. E. MCKAY, M.D., M.R.C.S.E., HALIFAX, N. S.

Mrs. D. F., æt. 52, was admitted into the hospital on the 28th of September, 1886, suffering from a vesico-vaginal fistula.

Previous history.—Patient had always enjoyed good health up to the time of her last confinement. She was the mother of eleven children, and most of her labors were very prolonged and difficult. In her last confinement, seven years ago, when the accident occurred which resulted in a vesico-vaginal fistula, she was in labor for nearly three days, and had to be delivered with instruments. Immediately after her delivery, she noticed her urine constantly dribbling away from her by the vagina, which caused her great annoyance and pain. This was the first intimation she had of anything being wrong. Since then her life had been a misery to herself and a source of annoyance to those around her. Two years after, a large tumor gradually appeared in the middle line, a little below the umbilicus, which proved to be a ventral hernia. Patient was bed-fast for nearly seven years.

Present condition.—When admitted, her general health was bad. She was very pale and anæmic, had no appetite, and suffered greatly from obstinate constipation of the bowels. The vulva, vagina, and perineum were extensively excoriated, and the skin and mucous membrane on those parts thick and indurated; the urine constantly ran away by the vagina in driblets, much to the annoyance of the patient and those around her. Everything about her had a very disagreeable urinous odor. There was a large bed-sore situated over the base of the sacrum, and a large ventral hernia in the middle line, half way between the pubes and umbilicus. On examination per vaginam, the measurement between the two tuber ischii was found shorter than the average, and there was a general contraction of the pelvis, either of which conditions would account for her prolonged and difficult labors. There was a large aperture, connecting the vagina with the bladder, which made them appear as if they formed one cavity. The superior anterior part of the wall of the vagina was firmly adherent to its posterior wall, and covered over the os and cervix, so that nothing could be seen except the bright, florid mucous membrane of the bladder.

Treatment.—To improve her general health and sharpen her appetite, she was ordered an aperient pill, to be taken at night, *pro re nata*, and a quinine and mineral acid mixture, *ter in die*; and beside the regular hospital diet, she was given as extras, beef-tea, egg-nog and milk two or three times a-day, with a very moderate amount of stimulant. To obtain a healthy condition of the parts, warm water douches were freely used, per vaginam, four or five times a-day, with injections of corrosive sublimate (1 to 2000) as often. A sponge, soaked in an antiseptic solution, was constantly kept in the vagina, to absorb any urine that might dribble away. These sponges were frequently changed. This treatment, general and local, was continued until her health was good and the parts restored to a perfectly healthy condition, when an operation was determined upon. From the enormous size of the aperture and the great loss of tissue at the base of the bladder, it was evident that an operation with a view simply to close up the fistula would be futile, and that nothing short of complete obliteration of the vagina would succeed in completely and permanently relieving her suffering; and as the patient was past "the change of life," there was no very serious objection to the performance of such an operation.

The necessary preliminaries having been attended to, the operation termed "kolpo-kleisis" was performed on the 17th day of December, in the following way: The patient having been etherized, was put in the lithotomy position, with the pelvis raised on a level with her chest, an antiseptic sponge was introduced into the bladder, and the parts were well held apart by two assistants. A straight staff was introduced into the bladder to press down the anterior vaginal wall. Then the mucous membrane was removed from the anterior wall of the vagina, as near the lower margin

of the aperture as practicable, to the extent of three-quarters of an inch, and also from its posterior wall and its angles on the same level and to a corresponding extent. The vivified surfaces were then brought in perfect coaptation and held there by silver sutures. The operation occupied two hours and a half in its performance. A catheter was constantly kept in the bladder, to draw away the urine as soon as secreted, until union was completed. The vagina was thoroughly washed once a day with a boracic acid solution, and a plug of absorbent cotton wool soaked in boroglyceride was constantly kept in it.

On the 27th day of December, the tenth day, after the operation, the sutures were removed when firm union was found to have taken place. The catheter was left in the bladder for two or three days after the sutures were removed. When discharged on the 5th day of February, she experienced no difficulty in passing water and could easily retain it for from four to five hours at a time. At the time of writing this article, the patient is perfectly well and suffers no inconvenience from her urine.

Correspondence.

FUTURE CANADA MEDICAL ASSOCIATION MEETINGS.

To the Editor of the CANADA LANCET.

SIR,—It is not too soon to bring the suggestions below before the members of the Canada Medical Association, and as doubtless most of the members are readers of the LANCET, if you will grant me space, I should like to submit the following: It has been repeatedly said that something ought to be done with the view of increasing the interest of members of the profession in our Association, and to secure a larger membership and better attendance at the annnal meetings, in order as well to promote general good feeling and union for our own strength, as the advancement of the science of medicine. I would suggest that special efforts be made this jubilee year, at the approaching annual meeting, to be held in Hamilton, to accomplish something in the way indicated. At the first possible hour of the meeting of this year, a committee should be appointed to consider the question, report upon it and have it discussed.

The annual meetings, as I believe has been heretofore the case, should be held at a time when medical practitioners could best, and should, take a holiday, of at least a week; as in the summer, when it is too warm to work, but not to travel quietly. It should be so arranged that the gatherings of the members of the profession should partake more of a holiday character, and be made more entertaining and social,—more play, if not less work. More time, not less than three or four days, should be given by all, if possible, to the conference. Greater efforts might fairly be made to obtain from railway and boat managers (who in the end would be gainers thereby) lower rates of travel; and from hotel keepers, by pre-arrangement, good accomodations at more reasonable charges. It would probably be to the interests of the Association never to meet at a point further east than Montreal, nor further west than Hamilton. On occasions, when necessary or admissible, funds of the Association might be used toward defraying expenses of the entertainments. By the careful selection of a small committee of the older and more experienced members for the examination of all papers to be submitted, only a limited number, on subjects of most special and general interest, need be read; and any others could afterwards be read before local society meetings. Certain members might be asked to prepare each a paper on some special, named subject, for the next meeting, which should of course be made known, when members could come more prepared to discuss them.

I would further ask permission, even now, to suggest that the meeting of the Association in 1888 be held in the capital of the Dominion, and that it be regarded, under the new order of things, as a special national convention. That early and unusual efforts be made, and which would doubtless be successful, to obtain greatly reduced fares on routes of travel, especially for long distances, as on the Canadian Pacific and Inter-Colonial Railways. That one of the special subjects for the consideration of the Association then, at this Ottawa meeting, be, the best manner in which to secure UNITED ACTION in the profession, amongst all its members, in all questions of public interest, as well as those which relate only to the profession; and another, the formation of a medical benefit and life insurance society for Canada, in

connection with the Association. Not less than four days should be given to this Ottawa meeting, one of which, say, might be pleasantly and profitably occupied by an excursion down the Ottawa, followed by a conversazione in the evening. It is not unlikely that quite a number of members of the profession in the neighboring States, and possibly a few from Great Britain, might attend the conference, if invited through the medical press or otherwise. Trusting these suggestions may be favorably considered, and bring out others,

I am, very truly yours,

EDWARD PLAYTER, M.D.

MEDICAL SCHOOL AMALGAMATION.

To the Editor of the CANADA LANCET:

SIR:—The following is the reply of the Corporation of Trinity Medical School, to the report of the Senate of Toronto University, in reference to the establishment of a Medical Faculty in connection with the University.

To the Vice-Chancellor and Members of the Senate:

GENTLEMEN,—At a meeting of the Corporation of Trinity Medical School, held a few days since, the report of the Committee of the Senate of the University of Toronto was, in accordance with the letter of the Registrar (Mr. Baker) accompanying it, laid before the Corporation for consideration. The report was very carefully gone over, section by section, and after mature deliberation regarding the scheme proposed in it, the following conclusions were reached:

I. The proposal to form a new Medical College to be called the "University of Toronto Medical College," which shall be the "Medical Faculty" of the "University of Toronto," is contrary to the policy of the Provincial University, as established in 1853, and would practically destroy its character as a Provincial University, so far as regards medical education, and would reduce it to the rank of one amongst several competing Universities.

II. The scheme submitted, is also, in the opinion of the Corporation, directly opposed to the Government scheme of "College Federation," which does not contemplate the amalgamation of the several federating Colleges—but carefully preserves their identity, and secures self-government to each, whereas, the affiliation of several Medical Colleges with the University, as at present and for many years past, is in harmony with the "College Federation" scheme, and this Corporation cannot understand why there should now, in the department of medicine, be any departure from that policy.

III. That even if, as is not the case, the proposed scheme were practicable in all other respects, it has no satisfactory financial basis to rest upon. Medical professors require to be adequately remunerated if they are to be expected to devote their chief energies to the duties of their respective chairs, and this would not be the case under the proposed plan, since it does not contemplate any provision for Professors salaries beyond fees obtained from students, and in the opinion of the Corporation, so long as Medical Education is dependent for its support on these fees alone, the present is the best system which can be devised, as it is eminently successful—does the country credit at home and abroad and—costs it nothing.

IV. The scheme as set forth in the report, would not promote the interests of Medical Education in this Province. It would not tend to decrease, and would to a certainty increase the number of Medical Schools, while on the other hand the present system gives a healthy stimulus to exertion,—encourages competition amongst the Medical Schools—begets an earnest desire on the part of the respective governing bodies of these, to be first, in efficiency and equipment, and a praiseworthy effort to educate men well, and thus fit them for success in their profession. This healthy rivalry between schools cannot injure the profession or the public, and benefits both, where, as in Ontario, all students, wherever educated, have to be examined by the Medical Council's Examiners, before being admitted to practice. Experience has clearly shewn that in Institutions removed from competition, the teaching is not, as a general rule progressive, nor is the management, always characterized by energy and efficiency.

For the reasons above given, the Corporation of Trinity Medical School is not willing to suspend its charter, and enter into the scheme proposed in the report.

Signed by order, and on behalf of the Corporation,

WALTER B. GEIKIE,

Trinity Medical School, *Dean.*
Toronto, April 6, 1887.

To the Editor of the CANADA LANCET.

SIR,—Will you kindly answer, through the columns of the LANCET, the following questions:

1. Should a physician change his clothes after visiting a case of diphtheria, before associating with other people, or visiting other patients? Of course I make exceptions to those cases where, in making an examination of a throat, matter has been coughed on to the doctor's clothing; when such an accident happens, as it not infrequently does, the question must be answered in the affirmative, but I have reference to ordinary visit

where nothing of this kind occurs. If it is not in the interests of the public generally or his own family, that the outer clothing be changed after visiting an infected house, the average *country* doctor, at least, would be spared no little inconvenience if assured of this fact; while I, for one, would prefer to go clothed in the primitive fig-leaf costume, to running the risk of spreading disease.

2. Will you or any of your readers give your views on the treatment of diphtheria by the internal administration of hydrarg. bichlor.? I may add that a limited experience with this drug has given me a favorable impression of its usefulness.

A COUNTRY DOCTOR.

[It is not considered necessary, in ordinary cases, to change the clothing after visiting a case of diphtheria. Competent authorities deny that the disease is carried in the clothes at all; thus Goodhart *(Diseases of Children)* says: "It is not communicated to other children or patients in a building, or carried about in clothing like measles or scarlatina." His American editor, however, gives a footnote to the above, in which he says: "Many authorities hold that diphtheria is contagious, in the ordinary sense of the term." The question, therefore, as to its being contagious, is an open one].—ED. LANCET.

To the Editor of the CANADA LANCET.

SIR,—I am called to a case of midwifery, and after careful examination, come to the conclusion that it is utterly impossible to save the mother without destroying the child. Two other medical men are called, and they come to the same conclusion. The nature of the operation is explained to the friends, but (being Roman Catholics) they refuse to allow us to proceed. Now what is our duty in this case? Should we allow the woman to die, without any effort to remove the fœtus by means of craniotomy? Would we be in any way responsible, after an operation had been refused?

Yours, etc.,

JUNIOR PRACTITIONER.

[Under the circumstances, cæsarian section should have been performed. This would have given both mother and child a chance of life. There are a sufficient number of recoveries to justify that operation, and when skilfully performed, it is claimed by some good authorities to be no more fatal to the mother than craniotomy. Among Roman Catholics this is the operation to be performed at all events, whatever may be the practice among Protestants. We are not justified in allowing both mother and child to perish].—ED. LANCET.

Reports of Societies.

OTTAWA MEDICO-CHIRURGICAL SOCIETY.

March 11th, 1887.

A regular meeting of the Society was held this evening; Dr. Sweetland, President, in the chair.

Dr. Prevost read a paper on gonorrhœa.

He commenced by quoting the words of Lisfranc, to the effect that out of 100 individuals 80 have had, have, or will have, gonorrhœa. He then went on to enumerate the seat and characteristic symptoms of the disease, and to show that it was now conclusively established that it was a specific disease produced by the contact of a special virus, and could not originate from ordinary sources of irration. He observed that, while there were those who still considered it possible for gonorrhœa in the male to originate from excesses in eating and drinking, leucorrhœal discharge and performance of the sexual act with too much violence or during the menstrual period, these could not now be accepted as causes of gonorrhœa—a disease which could only originate from a specific virus and in turn give rise to a specific disease. After taking up each of these supposed causes of the disease, and showing the difficulties pending on the acceptance of them as the true origin of the affection, he went on to point out how gonorrhœa in the female might be overlooked, and the difficulties attending its diagnosis when present.

He stated that the authority of Ricord, Cullerier, Rollet, Lardien, Guerin and Martineau, went to show that spontaneous or traumatic purulent urethritis did not exist in women—and that if with an inflammation of the vulva or vagina there coexisted urethritis, we could affirm the contagious nature of the vulvo-vagino-urethral inflammation. He then went on to give a means of establishing the existence or otherwise of urethritis in the female, as dysuria and strangury were rare as a symptom of that disease in women, which was as follows: The subject for examination being laid on

a bed in a good light, the thighs being flexed on the abdomen and well separated, the urinary meatus and circumjacent parts are dried with lint, and the index finger is introduced into the vagina to the depth of two or three inches, while at the same time the two sides of the vulva are separated by the finger of the left hand, thereby fully exposing the meatus urinarius. The index finger of the right hand, with the palm surface upwards, is made to exert a firm pressure on the urethro-vaginal wall from behind forwards along the course of the urethra, this is repeated two or three times, and if any pus exists in the urethra or in the fol licle surrounding it, pressure never fails to bring it out, and when perceived to exude from the meatus, there is no further doubt of the existence of a purulent and consequently gonorrhœal urethritis. To avoid any fallacy, care must be taken that no urine has been passed for some three or four hours beforehand. Urethritis in women has been found to be a very rebellious disease, and many authors assure us of having known women who communicated gonorrhœa three or four years after they had the disease, and when they fully believed themselves perfectly cured (Guerin, Gosselin, Martineau).

Blenorrhagia, he went on to show (on the authority of those above mentioned) may remain localized for a long time in the intra-urethral or vulvar follicles, unknown to the patient or even to the physician. Under the influence of oft-repeated intercourse the disease is again lighted up and again transmitted.

The same phenomena have been observed in the man as shown by the following aphorism of Langlebert: "After several attacks of gonorrhœa, or even only one sufficiently severe and protracted, the most simple exciting cause, a muscular fatigue, an excess of coitus or liquor will often suffice to recall the inflammation to the mucous membrane previously affected." From this he went on to show that blenorrhagia was undoubtedly a parasitic disease, and as such while the active indications of the disease might be dormant for a longer or shorter period, a slight exciting cause might at any time bring on a fresh attack. These facts were brought to light by M. Verneuil in a communication made by him to the Academy of Medicine of Paris during its sitting of the 3rd April, 1886. He showed plainly that our organism could conceal morbid germs capable of sojourning in our humours, our tissues, or organs, for a longer or shorter period, without betraying their presence by any symptom whatever. This he calls "latent microbical parasitism."

From this he drew the conclusion that the occurrence of a fresh attack of gonorrhœa in a person who considered him or herself cured, and who had not accounted for the origin of the attack from a recent exposure to contagion, was an evidence of the existence of "latent microbes," on one side or the other, as he considered it an established fact that gonorrhœa could not originate except from the specific virus of that disease. Martineau has found that the different secretions discharged from the vulva have not all the same reaction. They are generally alkaline, with the exception of that secreted by the mucous membrane of the vagina which is ordinarily acid. Gonorrhœal fluid is always acid, so that the fact of obtaining an alkaline reaction from any vaginal discharge constitutes a strong presumption against the existence of a virulent affection. With regard to the parasitic nature of blenorrhagia, recent researches seem to have established the fact of its being due to a parasite to which the name gonococcus had been given. While it has long been known that blenorrhagia was inoculable, and therefore the existence of some micro-organism was suspected, it was not till 1862 that anything was proved by investigation.

In 1872, Hulner discovered a micrococcus seated in the intercellular liquid, even in the blood of individuals suffering from gonorrhœal rheumatism. In 1878, Bouchard observed the micrococcus. But to N. Neisser falls the honour of having given in 1879, the first exact description of the gonorrhœal micro-organism. Since then a great many observers have recognized, described, cultivated and even inoculated this organism, and during the session of the Therapeutic Society of the 22nd Oct., 1884, Constantine Paul not only confirmed the truth of previous researches, but even went so far as to propose a prophylactic and curative treatment of blenorrhagia by solutions of corrosive sublimate. These facts are most important with regard to the diagnosis and pathogeny of gonorrhœa. The microscope in revealing the presence of the gonococcus in the discharges from the urethra, will establish in the future in an unmistakable manner the virulent nature of their origin.

The complications which may arise in the course

of gonorrhœa were then entered into. Gonorrhœal arthritis, is common especially among men. In nine years Cullerier observed but two or three cases in women; Guerin met one case in four years; Rollet, Diday, Panas, Martineau, never saw one. Why the affection should be so rare among women is not sufficiently explained.

Gonorrhœal rheumatism is rarely polyarticular; so that if a case of acute articular rheumatism is met with in which but one joint, particularly the knee, is affected, we are justified in suspecting gonorrhœa as a cause. Purulent ophthalmia in the adult is very rare except as a result of gonorrhœal infection.

A case of gonorrhœal arthritis was described, occurring in a young married man, who had a gonorrhœa every year for ten years past, and each time followed by arthritis affecting generally the left knee, on one occasion, all the large joints on the left side, and this year the right knee. The discharge, as shown by Fournier does not cease entirely, though it may diminish when the arthritis is set up. Many theories have been brought forward to explain the appearance of arthritis in connection with blenorrhagia. Thery, of Brussels, and Guyon look upon it merely as a coincidence, and not as a distinct pathological species. The patient is of a rheumatic diathesis and the blenorrhagia acts as an exciting cause. Hunter and Fournier consider gonorrhœal rheumatism as a mere urethral accident, similar to the articular affections sometimes produced after simple catheterism. Barth considers that the articular manifestations are to be considered as infectious pseudo-rheumatisms, belonging to the numerous class of arthropathies of infectious diseases. Paget and Weiss are of the same opinion.

Gonorrhœal rheumatism is therefore to be classed with the articular manifestation occurring in the course of infectious diseases, such as pyæmia and septicæmia.

In fact, as far as regards our knowledge of the pathology of rheumatism, may it not possibly be due to the presence of a microbe? On the 21st Sept., 1886, during the session of the assembly of the German Naturalists and Physicians at Berlin, M. Zimmerman, of Bâle, made a communication in which he held that rheumatism, no matter what its form as the consequence of infection, is amenable to specific remedies. In 1882, Lesitkon ascertained the presence of the gonococcus in the liquid of a gonorrhœal arthritis. In 1883, Petrom made a similar discovery in the purulent liquid of two cases of gonorrhœal arthritis. In 1884, Kammerer found also the gonococcus in the effusion of two cases of gonorrhœal arthritis. Another complication often met with in the course of blenorrhagia is purulent ophthalmia, a formidable affection which may accomplish its destructive work in twenty-four hours, if the disease be not cut short at the outset. Neisser has proved the presence of the gonococcus in the purulent discharge of gonorrhœal ophthalmia. This complication is evidently the result of inoculation of the conjunctiva by the virus, carried by means of the fingers or something which has been contaminated by the gonorrhœal discharge, and the partisans of the theory of metastasis now-a-days but weakly defend this antiquated opinion. De Wecker remarks on the comparative rarity of this complication, in spite of the great frequency of blenorrhagia and the carelessness of many affected with it. Especially remarkable is the immunity enjoyed by women. Martineau assures us that in the hospital of Lorraine he has not observed a single case in seven years out of two thousand women. This is a point very difficult to explain satisfactorily.

With regard to treatment, the following points are to be observed in all cases:

(1) Absolute absence from alcoholic beverages of every kind, and especially gin; (2) Sexual indulgence must be strictly forbidden, and attention is to be paid to the prevention of erections which may be often done by the patient having a dish of cold water by his bedside in which to plunge the penis; (3) No pressure is to be made on the canal in order to discover whether the discharge is completely arrested.

With regard to medicines. Copaiba and cubebs, with sweet spirit of nitre, linseed tea *ad libitum*, and 1 gr. opium, with 2 of camphor, at bedtime.

The first mentioned remedies of course should not be prescribed until the acute inflammatory symptoms have in a measure subsided. Styptic or irritant injections should not be used as long as there is pain. Bichloride of mercury, 1 to 20,000, is the injection of the future. In fact, this drug was made use of in 1865 by Kuss, of Strasbourg, before the parasitic theory of the disease had been discovered. At present, Fanté, in Italy, Diday,

Blondeau, C. Paul, and Martineau, in France, are those who more especially rely on this method of treatment. Martineau has found a urethral suppository containing from $\frac{1}{30}$ to $\frac{1}{10}$ gr. of bichloride very useful in women, and in gonorrhœal vaginitis, a solution of 1 to 2,000. The writer had himself found a most satisfactory result from an injection of 1 to 20,000 in a case of gonorrhœal vaginitis which had resisted a variety of treatment.

MEDICO-CHIRURGICAL SOCIETY, MONTREAL.

January 28th, 1887.

J. C. Cameron, M.D., President, in the chair.

Laryngeal Cyst.—Dr. Major exhibited a small fibrous cyst removed from the margin of the anterior commissure of the larynx. Before the operation the voice was harsh, rough and breaking from bass to treble during ordinary conversation. Since the removal of the cyst, however, the voice has been gradually improving, until of late it has become almost normal.

Tumor of the Ovary and Fallopian Tube.—Dr. Gardner exhibited a friable, irregular tumor about the size of a child's head, removed by him a few days before from a maiden lady of 43 years. On opening the abdomen, the tumor of the right ovary and tube was found firmly adherent to the intestines, omentum and floor of the pelvis. The operation was a very formidable one. The patient, however, recovered well from the effects of the operation, having experienced no severe shock, and was apparently making a rapid recovery.

Myxœdema.—Dr. James Stewart read a paper on a case of myxœdema.

Discussion.—Dr. R. L. MacDonnell said that the patient had been under his observation in the General Hospital at different times. It was generally regarded there as a case of tetanus. He had never been able to find that the patient had any tetanic spasms in the hospital, though these were carefully looked for. He did not think that the thyroid in the patient was altogether absent. In many it is difficult to make out the gland by external manipulations. Finally, he asked if Dr. Stewart had ever seen the patient in a tetanic spasm.

Dr. Merrill said he had known the patient some years. He had never seen any tetanic spasms, but the patient had complained about frequent attacks of severe colicky pains. He was always a very badly-nourished, dyspeptic-looking man.

Dr. Shepherd could not agree with Dr. Stewart's suggestion, that the reason myxœdema or cachexia strumipriva follows excision of the thyroid is because of the disturbing damage done to the sympathetic system, as the affection, so far as he knew, never followed extensive operations in the neck (as removal of chains of enlarged glands and tumors), when the sympathetic trunk is quite as much interfered with as in the removal of the thyroid. When no myxœdema follows the operation of removal of the gland, it is supposed to be incomplete removal.

Dr. Reed asked if Dr. Stewart could give the average temperature of the patient.

Dr. Mills said, To believe that any gland or other organ existed to *prevent* the formation of a substance, whether normal or abnormal, was inconsistent with general physiological principles. True, the removal of certain glands, as the testicles in the young, arrested development, both physical and psychical. In the adult dog, such removal was followed by obesity, which could be largely accounted for by the inactivity of the animal, associated with the psychical shrinkage—the curtailment in the number and variety of the afferent impulses reaching the nerve centres. It had been asserted that after the removal of the thyroid in children there was stunted development, especially intellectually. It is likely metabolic changes follow removal of the thyroid; owing to the influence on the nervous system there is a loss of balance. All healthful life implies balance of function. It was not yet clear how the balance was destroyed by removal of the thyroid; but we were on the way to knowledge, for we had learned, experimentally, that this organ was not a blood-former. If, as had been suggested, the changes following experimental or surgical removal were due to injury to the sympathetic, one would expect to observe vaso-motor symptoms, which had not been the case, though such an objection must not be too strongly urged; for though dilation follows section of the cervical sympathetic, such is not permanent, and if transient, might be overlooked.

Dr. Stewart, in reply, stated that he had seen the patient in tetanic spasms many times. When first seen the patient had an attack. With regard

to the average temperature, it was low—about 97°. The patient always complained of cold. The whole question of the function of the thyroid was still in a very unsettled state. He did not wish to be understood as saying that atrophy or disappearance of the thyroid had nothing to do with myxœdema. There is certainly evidence pointing strongly to both myxœdema and tetany being due to changes in the nervous system.

HAMILTON MEDICAL AND SURGICAL SOCIETY.

April 5th, 1887.

The President, Dr. McCargow in the chair.

Dr. McCargow exhibited a specimen of disease of the vermiform appendix with part of the ileum and gave some history of the case. He also exhibited a specimen of cancer of the penis from a negro æt. about sixty years, of some months' duration, Dr. Malloch removed the penis. In this case the disease had extended high up, and being complicated with a swollen gland in the groin, amputation close to the pubes was necessary. The gland was also removed. To obviate the irritation which would be caused by the flow of urine over the scrotum and adjacent parts, the scrotum was split, the spongy portion of the urethra dissected down to the triangular ligament and brought out in the perineum, the corpora cavernosa cut off close to the bones. The incisions were then brought together with sutures and the necessary dressings applied.

Dr. Malloch also reported two cases of perineal section which occurred during the past week, one from retention due to hypertrophy of the prostate complicated with a false passage. He expressed an opinion in favor of Harrison's method of puncturing the prostate, but not having the necessary instrument, he cut into the membranous portion of the urethra and established communication with the bladder. The second case was one of extravasation of urine, resulting from a traumatic stricture of two years standing. The patient when first seen had not passed any urine for four days. When examined the scrotum was found enormously swollen and the bladder much distended, very little pain was complained of. Wheelhouse's operation was performed. A grooved straight staff was passed into the urethra until it came to the stricture. The incision was then made in the perineum and the stricture divided. The staff then turned so that the knob on the reverse side caught the urethra, and by gentle traction the urethra was put on the stretch; a sufficient opening being made in the urethra, a No. 12 gum elastic catheter was passed into the bladder. The catheter was then bent and the other end passed into the urethra above the stricture and carried up till it appeared at the meatus, the scrotum was then freely incised, to allow the escape of urine, and a large quantity was passed from the bladder through the catheter. The patient is at present doing well.

Selected Articles.

CONSTIPATION.

BY J. J. MILNER FOTHERGILL, M.D.

In the constant round of daily practice the physician commonly encounters cases where the bowels are not properly open. Both sexes and all ages are liable to this undesirable condition. Frequently the constipation is very obstinate, and refuses to yield to the measures employed; or in other cases is only kept at bay by the constant resort to laxatives or even cathartics.

The bowel is not only the recipient of the waste and undigestible matters of our food, but has its own glands, which are not all absorbent. Whether the offensive odor of the fæces is due to mere fermentive or putrefactive change in the contents of the lower bowel, or the glands situated thereon lend some of the fœtor, it may not be easy to perfectly determine; but any one familiar with obstetrics knows how, when the fœtal head is distending the perineum, the glands situated near the anus can be distinctly felt like so many small shot, and their secretion is as offensive as it is difficult to remove from the hands. The excreta possess an offensive odor which secures their disposal, and thus one good sanitary end is served by the unsavory secretions of these glands. These glands serve to lubricate the mucous lining of the intestine and thus expedite the passage over it of the contents of the bowel.

Any loss of activity in the muscular movements of the intestine will favor the tendency to a constipated condition. This is met with at all stages of life, but perhaps it is most markedly seen in the case of young females. A natural delicacy impels them to avoid the proximity of the closet, and gradually the bowels are taught to carry a greater and accumulating load. The pouches of the bowel become distended, and the fæces which pass them

are alone voided, and are of more or less fluid consistency; so that a girl may believe her bowels open, or even think herself the subject of looseness of the bowels, when in reality her abdomen is filled with fæces. One untoward result of such chronic constipation in young girls is displacement downwards of the ovaries, and these organs may become glued down to their new habitat by adhesive inflammation. Two unfortunate outcomes of this displacement of the ovaries are (1) sterility and (2) irritable ovary. The most marked case of this kind which ever came under my notice was that of an American lady. For the sterility of course nothing could be done, the ova being hopelessly beyond the reach of the fertilizing zoösperms. For the irritable tender ovaries something could be done, but the effects of treatment were so little satisfactory that the removal of the offending and useless organs was discussed.

Such a condition of chronic overloading of the bowels is furthered by the lack of bodily exercise during school-life. The school-girl is busy with her lessons and absorbed in her work; she scarcely gives a thought to her bowels, and perhaps is rather glad that they do not force themselves upon her attention. The resultant consequences are that the large bowel becomes distended, while the muscular fibres become attenuated, and the bowel becomes incapable of properly unloading itself when the opportunity is offered. The uterus is forced down upon the floor of the pelvis, and, as we have seen, the ovaries may be displaced. Until physiological aspirations arouse the idea of matrimony, and the marriageable age is reached, little attention is given to the physical state; and then a confirmed condition is discovered and one requiring considerable attention and trouble for its removal

In selecting remedial agents the choice must be guided by the precise requirements of the morbid condition. To restore the muscular activity is as important as to excite the secretion of the intestinal glands. The ordinary catharsis does both, and so sweeps the contents of the bowels out by the anus. But every physician of experience knows well that the recurrent resort to active purgation gives about as unsatisfactory results as well could be attained. In the first place women of all ages bear active purgation very badly. The griping pains are ill borne and depress very acutely. When the bowels are cleared out by a violent action the process of loading up again sets in immediately, and another catharsis is soon required with all its attendant discomfort. In this respect women are closely approximated by men of feminine type. Active purgation is only well tolerated by robust persons. In others it should only be adopted when there is some distinct end to be served by it.

An occasional clearance of the bowel may be desirable; but the treatment should consist of a small amount of laxative materials, taken with perfect regularity, persistently and steadily. Two classes of laxative agents present themselves for notice: these are vegetable substances and mineral substances. Frequently they can be combined with advantage. For women the vegetable laxatives are best. As compared to men they do not bear well mineral purgatives, whether as natural waters or artificial solutions. Fortunately vegetable extracts readily lend themselves to pill form. The first laxative to come into general use was rhubarb. But unfortunately rhubarb has a secondary binding tendency following the primary purgative action. Thus, it is unsuitable for habitual use, though this action gives it a peculiar value when the bowels are to be unloaded previous to an operation on any of the contents of the pelvis. (In cases of diarrhœa set up by a railway journey, such use of rhubarb is most excellent). The persons who adopt rhubarb for the relief of habitual constipation are not likely ever to be cured. It has fallen to my lot to see such a case quickly relieved by substituting for the rhubarb some other laxative. Next in frequency of resort is aloes. Aloes acting upon the lower portion of the bowels is in great vogue in constipation linked with amenorrhœa (partial or complete). In consequence of this localized action aloes in full doses are not exhibited in pregnancy, except from ignorance or criminal intent. Fordyce Barker sees a certain utility in this localized action, and has from experience found that the stimulant action of aloes upon the area supplied by the hemorrhoidal arteries is good in the piles of pregnancy. Certainly the use of aloes in small doses, in combination with other laxatives, is rational practice. A certain amount of aloes should form a factor in the remedial agents employed in all forms of constipation in women, whether pregnant or not.

Then, beyond these two familiar laxatives, a host of others, which are more or less in use. Colocynth, gamboge, jalap, scammony, cascara sagrada, are perhaps those most in vogue. Castor-oil is rarely resorted to for constant use; while croton-oil might be more prescribed than is at present the case with advantage.

One matter, especially with female patients, must never be forgotten, and that is, to diminish as far as possible the griping pains which activity in the muscular fibre of the intestine sets up. When the vermicular action is roused, violent contraction produces a griping pain very commonly; yet the muscular activity is essential to cure. To prevent this griping it is usual to add carminatives to the laxative; black pepper, cayenne, and the essential oils all possess the property of taking away to a great extent these painful contractions, and so can be incorporated in the pill with advantage. One point must be borne in mind about the griping pains produced by the exhibition of laxative medicines, and it is this: griping may be due to violent contractions of the muscular fibre, which,

however, may be ineffectual and then the remedy is to increase the dose, when effectual efforts bring with them the desired relief. When the patient complains of griping pains it becomes necessary to ascertain whether the bowels are freely open or not; if not, a larger dose must be given. But if the bowels are freely open then the dose may probably be reduced with advantage.

In order to secure more energetic action in the muscular fibre of the intestine it has become usual to add a little strychnia to the habitual laxative; and a very good practice it is. The steady use of such a compound pill will be found in time to put the bowels in a more desirable condition. But—in my experience at least—persons who suffer with habitual constipation lack perseverance. They either contrive to forget their medicine, or they give it up as soon as they are partially relieved, and do not continue it (in lessened doses) until the new order of things is firmly established. And if the palate is offended by the medicine, abandonment of it prematurely is almost certain to happen. Consequently humanity has declared for pills as the form of remedy *par excellence* in constipation.

A good combination would be provided by something of this kind for habitual use:

Strychniæ,	gr. i.
Pulv. aloes,	ʒ i.
Pulv. piper. nig.,	ʒ i.
Ext. cascara sagrad,	℈ij.

In pil. xxiv div. 1 bis. indic.

When the bowels have become more regular then instead of a pill night and morning one at bedtime alone would be sufficient; and after a time the pill might be given up entirely, having fulfilled its purpose. If something more potent is required then half a drachm of croton-oil may be added to the pill mass.

Some practitioners are fond of giving hyoscyamus to relieve griping.

Where the condition is not very pronounced a laxative pill at bedtime once or twice a week is sufficient. Where the patient is of a rheumatic nature, or there are deposits in the urine, it is well to add a mercurial to the laxative. Something of this kind would be found serviceable:

Calomel,	℈ i.
Ext. hyoscyami,	℈ iss.
Pil. coloc. co.,	℈ i.

In pil. xii div. 1 p. v. n.

When such a pill is found not quite potent enough it may be well to assist its action by a draught of cold water on getting out of bed next morning—often itself very efficacious Or some form of purgative water may be preferred, or a seidlitz powder, or some effervescing preparation, of which the name is legion.

If one line of attack fails, then try another. Some victims to constipation try a variety of compounds before they find what they desire. In one case it is a proprietary medicine, in another an orthodox prescription. One old lady who for half a century had been in search of a remedy paid me the compliment of asking me what I could suggest. It was in my early days, and the range of my knowledge was limited, but I hazarded the suggestion that a draught of cold water on rising often proved a very good remedy. She adopted the suggestion with the most satisfactory results, and prophesied a career of usefulness for me.

When something is taken in the morning it is uncomfortable, and for business men in cities well-nigh impossible to have the bowels acting during the day. To secure prompt action it is well to take the dose of purgative water (or its equivalent) with hot water, or tea, or other warm vehicle. This will usually produce the desired effect; and, if taken on getting out of bed, secures the desired operation by the time breakfast is over. When a pill has been taken previously at bedtime the bowels are usually ready to operate soon after the morning draught is taken; and then a motion before breakfast, followed by a second when that meal is over, fits the bilious business man for his day's work. Where a person is depressed and liverish, to sweep all spare bile and all offensive matters out of the intestine is to give a mental cheerfulness which contrasts with the gloom which reigned before.

Where children are subject to constipation something palatable is required. Children, even more than adults, resent what has an objectionable taste. Castor-oil is detested in the nursery, and not without reason. Tincture of senna in a little tea is preferable But of all forms of laxative a sweet ginger biscuit or cracker containing a few grains of jalap is the least repugnant to the childish palate. It should not be too hot, else the ginger offends. If such a toothsome sweetmeat be granted as a reward for good behavior the ruse will usually be successful; but if a shadow of a suspicion be excited that medicine lurks in the sweetmeat a new line of attack at once becomes necessary. In other cases a little oatmeal or maize porridge to breakfast is enough. At other times some stewed fruit, as figs, French plums, or even ordinary garden fruit, is found efficacious.

With many adults some treacle on whole-meal bread relieves the condition which renders life a burden. The mechanical irritation set up by the particles of bran excites the vermicular action of the intestine, and all is well. Brown bread eaters are common everywhere. When travelling such persons are liable to the presence of their bane because brown bread is not always to be had. It will be well for these individuals to lay in a stock of pills in a travelling medicine chest or the now fashionable compound liquorice powder, or a bottle of some granular effervescent preparation.

When constipation is—as it very commonly is—linked with inadequate action of the liver, the pure laxative should be linked with a hepatic stimulant. In the second edition of my *Practitioner's Handbook of Treatment*, many of the prescriptions were altered, and the sulphate of soda substituted for sulphate of magnesia; the latter being a pure laxative, while the former possesses also a distinct action upon the liver. A certain very august personage is said to repose unlimited confidence in sulphate of soda, and certainly time has fully justified that confidence and demonstrated that it has not been misplaced. Others again find that phosphate of soda, familiarly known as "tasteless aperient salts," meets their requirements. Carlsbad salts also are in vogue.

The administration of an habitual laxative and the decision as to what agent or combination of agents and what doses shall be employed is one of the trials of prescribing. If the dose agrees at first, in a week or a month it is either too potent or it loses its effect, and then an alteration of the dose or the employment of some other agent or combination of agents becomes imperative. Some persons have to keep "ringing the changes" and going a certain round, once more reverting to some compound that had lost its effect in past times. When a laxative has to be combined with tonics (or any drugs which have to be taken for some time) it is often well to give two prescriptions, one more laxative than the other, and then let the patient arrange the doses as he or she requires. If this gives the patient a little trouble—well, the patient after all is the person who is benefited, and the trouble brings with it its own reward.—*Med. Register.*

THE TREATMENT OF COLDS.

Of all disagreeable constitutional tendencies, the tendency to "catch colds" is one of the most disagreeable to the individual, and besides the unpleasantness there is always the danger that a catarrh may outstep its usual limits and develop into some grave inflammation.

Is the nature of common catarrhs generally understood? To a certain extent I think it is, but not fully. Let me enunciate the broad characteristics of colds. Catarrhs are excited *de novo* by exposure to wet, cold, and draughts. This is a truism. Most frequently they develop in delicate and in highly neurotic individuals, in fact in the classes which furnish martyrs to common neuralgia. I believe moreover that when once a catarrh is properly established the affected person's breath is infectious, in the acute stage of the disease at least. What then is the nature of the affection? (1) Is it a specific poison comparable to that of the infectious fevers? (2) Does the affection start as an idiopathic inflammation and develop a specific poison which is given off by the breath? (3) Is it of nervous reflex origin purely?

Bürger has discovered micrococci in catarrhal secretions, and they are possibly factors in the affection. Let us suppose that these micrococci or their spores are distributed nearly universally in the atmosphere, and are carried in fomites. Let us suppose them in their usual state to be unable to attack the healthy buccal, nasal or other mucous membranes. Let us presume that there is a condition in which the trophic nerves of those membranes become depressed and lose their tonic action by the action of poor blood, or from the periodical neurasthenia of hereditary neurotics. Here the result of section of the trigeminus on the eye is recalled to one's mind, and the fact pointed out by Snellen that ophthalmia did not ensue if the eye was carefully covered with cotton-wool, thereby to a great extent excluding micro-organisms, before the nerve section was made. Let us suppose that by feeding in such pastures, the progeny of the attacking catarrhal micrococci becomes so virulent as to be able to attack successfully the healthy membranes. We know by Pasteur's experiments the extensive effects of culture on some micro organisms. On these not unreasonable suppositions, then, all the peculiarities of catarrhs are explainable.

Influenza epidemics may be explained by supposing that with large tracts of country all catarrhal micrococci became suddenly virulent, owing to some climatic or telluric fostering cause, or to some law of heredity or evolution of the organisms themselves. This would account for the extensive and sudden outbreaks which, on first view, seem so surprising.

The usual "coddling" treatment of colds, except the very old, very young, or very delicate, is a mistake. A person suffering from a catarrh should certainly be warmly clothed and avoid draughts; but by shutting himself up in a warm room, by taking warm air baths and lowering medicines, he only promotes the development of the exciting cause of the affection.

"Feed a cold, starve a fever." There is a deal of wisdom in the first part of this advice. A person with a catarrh should take an abundance of light nutritious food, and some light wine, but avoid spirits, and above all tobacco.

Now as to medicines. All depressants should be avoided. For some time I was in the habit of taking a mixture recommended by Dr. Jukes Styrap, composed of minute doses of morphine, antimonial wine, and potassium citrate. This beyond doubt always subdued the acute inflammatory stage, but I have no hesitation in saying I was depressed by its action, and rendered liable to relapses and renewals. Personally, I have found the large dose of an opiate in the early stages, as extolled by Sir Thomas Watson and Dr. George Johnson, very unpleasant and of but little use.

Trying to avert an attack by a large dose of potassium iodide failed in my hands. The bromides were useless through all stages. Antiseptic inhalations and spraying afforded temporary relief from the distressing symptoms, but failed to cure.

Belladonna, quinine, and arsenic I have found useful when given separately—not so much in large as in small doses. When combined I believe them to be nearly specific—prophylactically and therapeutically, if I may so speak.

The formula I invariably use is as follows :—

℞ Quininæ sulphatis, ... gr. xviij.
Liquoris arsenicalis, . . . ♏xij.
Liquoris atropinæ, ... ♏j.
Extracti gentianæ, ... gr. xx.
Pulveris gummi acaciæ q.s. ut fiant pilulæ xii.
Sig. One every three, four, or six hours, according to circumstances.

If these pills be commenced in the early stage of a common cold, *i. e.*, when the affection is as yet confined to the nose and pharynx, the affection will be nipped in the bud. At starting, one pill should be taken every three or four hours, and later on every six. If a catarrhal subject has a box of these pills always at hand, he has, I believe, a weapon wherewith to meet and defeat his enemy. The longest time I have seen a cold last while the patient was fairly taking these pills was three days. How the remedy acts I do not know, except it be as a powerful nervine and general tonic, bracing the patient's tissues up to resist the attacks of the exciting cause of the affection.—J. H. Whalen, M. D., in *The Practitioner*.

MEDICAL NOTES.

Prof. Bartholow states that styptic collodion is an efficient application to *bleeding hemorrhoids*.

Prof. Brinton is fond of small copper wire coated with silver for *sutures*, especially in parts exposed, as the face.

In *fatty hearts*, with occasional attacks of pseudo-apoplexy, Prof. Da Costa prescribed gr. 1-40 strychnine, three times a day.

In watery, *colliquative diarrhœa*, Prof. Bartholow claims that no remedy is more valuable than sulphuric acid, to which opium may be added if necessary.

In *cardiac asthma* arising from dilatation and pericardial adhesions, Prof. Da Costa, after alluding to digitalis, adonis and the sulphate of sparteine as also appropriate remedies, prescribed five drops of the fluid extract of convallaria, which was gradually to be increased to ten or fifteen drops three times daily.

For local use in *chronic eczema*, Prof. Da Costa prescribed the following :

℞ Ung. hydrarg. oxidi rubri, . ʒij.
Unguent. sulphuris, . . . ʒij
Acid. carbolic, ... gr. ii.
Unguent. simplicis, . . . ʒss. M.
Sig.—Apply to affected part.

Progressive muscular atrophy, occurring in a patient having fatty heart, was treated by Prof. Da Costa with—

℞ Strychninæ sulph., . . . gr. $\frac{1}{30}$
Ferri carbonatis, ... gr. iij. M.
Sig.—Ter die.

Prof. Gross states that he would treat *pneumonia* thus: If seen early, he would bleed the patient until the pulse became soft, and follow this by aconite, veratrum, or gelsemium. He would give an active purge, perhaps of the compound infusion of senna—four ounces. Would combat the hyperpyrexia with quinine or antipyrin, and would place poultices to the chest.

Prof. Bartholow still continues to advocate the use of carbolic acid in *typhoid fever*. He states that no form of treatment has, in his hands, been so successful. It modifies the disturbances of the intestinal tube, reduces temperature and promotes quiet. Two drops of a solution consisting of equal parts of carbolic acid and Lugol's solution may be given every three hours.

Hydrastis canadensis (fluid extract) is an excellent local application in *cervicitis*, *endometritis* and *vaginitis*, the one great objection to its use being its straining properties. In gonorrhœa, the fluid extract mixed with mucilage as thick as can be used by injection, is of much service. It should be retained in the urethra for some time, and the urethra should have been previously cleansed with water or a solution of sodium chloride.

A case of *sciatica*, originating by strain, having persisted for four months and resisted iodide of potassium and colchicum, and having been only temporarily relieved by atropine and morphine, was finally made to succumb to gr. $\frac{1}{100}$ of aconitia three times daily, prescribed by Prof. Da Costa. The patient became almost immediately much better, the pain disappeared and improvement continued. After a week the remedy was given but twice daily and gradually withdrawn.

Clemen's solution of bromide of arsenic, said by Prof. Bartholow to be the best remedy brought forward for *diabetes*, can be prepared as follows : Boil in eight ounces of distilled water 57½ grs. each of powdered arsenious acid and carbonate of potassium. When cold add sufficient distilled water to make eleven and one-half Troy ounces, and in this dissolve 115 grains of pure bromine. This will need occasional strong shaking for the

first week, and the solution will not be perfect or clear for three or four weeks, when it will then be ready for use. The dose is one drop three times a day.

When stimulus fails to maintain the pulse and heart's action in *typhoid fever*, Prof. Da Costa states that cocaine has given him most satisfactory results. It will sometimes establish convalescence rapidly when, under stimulus, the cases seem to be rapidly failing. A case shown at the Pennsylvania Hospital, which was receiving ℥ xij of whiskey in 24 hours, and with no response, began at once to improve on gr. ¼ of cocaine every two hours, afterward increased to gr. ½ every third hour; the whiskey at the same time being kept down to ℥ viij.

Prof. Gross's favorite prescription for *secondary syphilis* is—

℞ Hydrarg. iodid. viridis, . . gr. ⅕
Antimonii et potassii. tartrat,
Morphinæ sulphat, āā . . . gr. $\frac{1}{24}$. M.
Ft. pil.

For a cure, take one after each meal; after two days, take two pills after dinner; in a few days, if no bad symptoms arise, increase to three pills after dinner and two after breakfast. Increase until it is found what patient can tolerate; five pills a day about the usual amount. This should be persisted in until all symptoms disappear; then cease for a short time, and then renew with ⅔ dose. With intervals of a few weeks every two or three months gradually reduce the dose. After two years in this way we may then cease, but keep the patient under observation for eighteen months longer.—*Coll. and Clin. Rec.*

HYDRASTIS CANADENSIS IN UTERINE HEMORRHAGE.

The recorded experience in the use of hydrastis canadensis covers more than one hundred cases. Before adding my own, I would state that metrorrhagia especially and menorrhagia have been the determining symptoms for the use of this drug. I would define menorrhagia as a condition of menstruation when the flow, previously normal, becomes profuse, or has always been profuse, when compared with that of women of the same station and time of life, and is evidently too great a loss for the patient to bear. Although nothing, so far as I know, will conceal its unpleasant taste, yet I have given only the fluid extract, in doses of twenty drops three or four times daily in a wineglass of water, in cases of fibro-myomata, subinvolution, and hemorrhagic endometritis continuously, in other cases of ten days before and during the menstrual period. I have never used hydrastin or the other alkaloids, because of the great variations in their strength.

I have used hydrastis canadensis in three cases of uterine fibro-myomata.

My conclusions in these and the subsequently enumerated cases are supplemented by the results of treatment in the observations of the writers whom I have already mentioned. Hydrastis checks the bleeding from uterine fibro-myomata by the production of persistent anæmia, unaccompanied by the distressing cramps of ergot or the flooding from the alternate contractions and relaxations. So in the cases of small fibroids it is preferable where their expulsion would probably be attended by hemorrhage or septicæmia. We all know that enucleation by the spoon-saw is frequently followed by death, that removal of the ovaries (castration), or removal of what has been termed, curiously enough, the uterine appendages, is generally unnecessary and contra-indicated, aside from the great danger to life, on both social and moral grounds. In face of the experience of the various observers above enumerated, every man, before resorting to abdominal section, should consider that he may needlessly sacrifice a human life.

Of hemorrhagic endometritis I record seven cases, five being cases of endometritis fungosa.

In hydrastis, then, we have a sovereign remedy, in endometritis fungosa, even when curetting has failed to arrest the bleeding. I have seen a fatal result from the apparently simply operation of curetting. That there is danger attested by the number of so-called antiseptic curettes to be found in the market. When the use of hydrastis no confinement to the bed is necessary.

Sixteen cases of subinvolution of the uterus have been treated by hydrastis. All of these patients were examined, and in many instances the uterine cavity measured from time to time. The average duration of treatment was about that of preparation for the operation of closure of the cervix. Had these patients come under my observation a few years before, I should have undoubtedly operated upon the greater portion of them. Hydrastis canadensis, then by its faithful use, will often render Emmet's operation unnecessary. We see the uterus becoming smaller, the leucorrhœa diminishing, the erosions healing, the displacements becoming rectified. Apparently it is to this class of cases that Shivestizeneff refers, although he does not apparently recognize a lacerated cervix.

I have treated successfully five cases of climacteric hemmorhage with hydrastis. The results obtained in these cases I regard as admirable, and believe we have a valuable remedy in the class of cases, which sometimes are very difficult to relieve. It is only fair to say that I have also used the bromides sparingly and arsenic somewhat vigorously, but I feel positive that, in removing one cause of general anæmia, hydrastis has been of great benefit.

Nine cases of pelvic inflammation have come

under my care which have been treated with hydrastis. The more accurate diagnosis will be given with each case. Since I have been using hydrastis in these cases I have abandoned the use of iodine, to some extent that of hot water, and in a measure local treatment. I should even be inclined to use this remedy in pyosalpinx, because by it we can reduce the hyperæmia without producing contraction of the tubes. I have seen too many healthy tubes removed, to operate before having exhausted medical therapeutics, and, further, I have found postmortem that even pyosalpinx can become quiescent, the pus becoming cretaceous, the whole process apparently never having given rise to any symptoms.

Three cases of congenital anteflexion have been treated with such marked relief of symptoms that I report them here. In this flexion of the uterus, producing what has been called obstructive dysmenorrhœa, although the worst cases as regards pain and intractability, have been cases with a patent uterine canal, the artificial anæmia has not failed to relieve the cramps, the pain, and generally the nervous symptoms as well. This drug also obviates the necessity of having recourse to the operation of posterior section, which is ordinarily one of the most fatal of all the minor operations. In these cases, if hydrastis is employed, local treatment is entirely unnecessary. I would even go farther and say that, in many cases, an examination can be dispensed with. The only interest that the patient has is that her symptoms shall be relieved; that is the only interest that the physician should have, and, if it can be accomplished without an examination, I regard an examination as entirely unnecessary. I am prepared to say even more, that I would have it the established rule that no examination of an unmarried woman should be made unless with the unanimous decision of a consultation, one of the physicians, at least, to be a general practitioner.

In this paper I have aimed to show that results can now be satisfactorily attained by medical means which were formerly reached only by surgery. I regard every step in this direction to be a decided advance, because it brings gynæcology into the hands of the general practitioner to a greater and still greater extent. To do this is, I maintain, the first duty of the specialist. Before closing, I wish to remind you that disputed questions have never been settled by the specialists and rightly so. They come for their final verdict before the jury composed of general practitioners. The gynæcological question of to day in this: Shall we lead the revolt against needless operations, dangerous mutilations, and unnecessary and debauching examinations, or shall we wait to be driven into line by the outraged sentiments of the profession at large?—Dr. R. W. Wilcox in *N. Y. Med. Jour.*

PROFESSOR VIRCHOW ON CHARCOT'S JOINT-DISEASE.

At the meeting of the Berlin Medical Society, held on November 17th, a most interesting discussion took place on the joint-affection peculiar, as is generally assumed, to tabes dorsalis. The subject elicited a speech, which amounted to an address, from Professor Virchow. The debate was opened by Herr Rotter, who began with these questions: 1. Is the joint-disease (occasionally) found in tabetic subjects a special arthropathy different from all other joint-affections? 2. Is this joint-affection only indirectly connected with the tabes, or is there an intimate causal connection subsisting between them?

Clinically considered, this (Charcot's) joint-disease, said Dr. Rotter, was peculiar in the following respects: Its appearance in a definite stage of the tabetic disease, the so-called prodromal stage; its sudden onset; the absence of inflammatory signs; the analgesia of the deep parts, especially of the bones; the peculiar swelling of the soft parts; and, lastly, the rapid destruction of the joint.

Pathologically, it differed from arthritis deformans, inasmuch as ulceration of the intra-articular structures was enormously in excess of new growth, while the reverse was the case in the latter disease, especially as regards extra-articular bony growth. But this does not necessarily constitute a specific difference, for many authors refer the peculiar character of the tabetic joint-disease to analgesia of the bones, and the want of regulation in the loads they bear, the result being increased liability to injury. Others, again, consider the disease to be a special nervous affection, because, in the first place, it usually precedes all ataxic phenomena; secondly, the process may occur in the upper limbs, which have no abnormal weight to bear; and, lastly, it may attack bedridden people. A specific joint-disease, from direct nervous influence, is here assumed to exist, the affected bones being supposed to have an abnormal liability to fracture and lessened resisting capacity, and the bony alteration being strictly limited to circumscribed parts. This liability to fracture is assumed upon the following grounds: 1. Intra-capsular spontaneous fractures are not seldom found in this disease (the diaphysis being in this case affected, instead of the epiphysis): 2. Microscopical and chemical examination have revealed corresponding changes in the bones; microscopically, a rarefaction commencing centrally, and advancing to the periphery; and, chemically, a decided lessening of phosphorus and calcium carbonate, and an increase of fat. These latter changes are considered primary, and due to special nervous influence, and not merely secondary to the joint-disease. Other joint-diseases in tabetic subjects run their usual course.

Such is the case ably presented by Herr Rotter on behalf of a specific arthropathy in tabetic people. Virchow opposed this view. There was no doubt at all in his mind that the usual causes of joint-affection—mechanical and thermal causes—sufficed to explain the disease. He could not understand how a nervous (trophic) influence, starting from a diseased spinal cord, could be so entirely limited to a single joint As to the early appearance of the joint-disease, that was both difficult to prove, and also a suspicious statement. Some cases —notably one of hip-joint disease, as to which he had differed in opinion from Westphal—were doubtless due to congenital luxation, or luxation soon after birth. Again, in some cases, disease of the knee-joint followed upon fracture of the femur in the lower third. Others, said to be tabetic, were plainly syphilitic. Indeed, a large proportion of cases assumed to be tabetic had been proved to be due to syphilis. But lastly, there was no doubt that arthritis deformans was the disease to be kept the most in mind. Even the advocates for a tabetic arthropathy allowed that the process was at first one of proliferation, to which a regressive stage (of loss) succeeded The only peculiarity lay in the quicker course of affairs, and the more startling results prodnced.—*Brit. Med. Journal.*

DURATION OF THE SYPHILITIC CAPACITY IN RELATION TO MARRIAGE.

In a paper read before the N. T. County Medical Society, Feburary, 1887, Dr. P. A. Morrow formulates the following conclusions on the above subject :—

1. The facts of every-day observation show that there is nothing constant in contagion, nothing certain in heredity. Many men marry with a syphilis in full activity of secondary manifestation and never infect their wives or transmit the disease to their offspring. These negative observations are, however, entirely valueless as a basis for estimating positive results

2. The modern division of syphilis into secondary and tertiary periods, based upon anatomical forms and processes, does not furnish a safe criterion for determining the contagious or non-contagious character of the lesions.

3. The chronological completion of the secondary stage does not always mark the definite disapperance of the virulent principle ; clinical experience shows that late lesions are exceptionally, but none the less certainly, the source of contagion.

4. While in the immense majority of cases the contagious activity of syphilis and its susceptibility of hereditary transmission cease after the third or foruth year, yet well-authenticated observations prove in the most positive manner that these qualities sometimes continue in force much longer and may be manifest in the fifth and sixth year of the disease, and even later.

5. The aptitude of syphilitic parents to procreate diseased children may persist after the cessation of all specific manifestations ; the contagious stage of syphilis is not, therefore, the exact measure of the duration of hereditary influence.

6. The precise date in the evolution of the diathesis, when the syphilitic organism undergoes that radical transformation which marks the limit of its contagious or transmissive power, does not admit of mathematical expression.

7. It is probable that this limit varies in different cases and that many circumstances contribute to advance or defer it.

8. The type of the syphilis, the constitutional peculiarities of the patient, the character of the treatment, the presence or absence of certain conditions which are recognized as factors of gravity in syphilis, all exert a modifying influence.

9. All these elements should be taken into consideration in deciding upon the admissibility of a syphilitic man to marriage ; each case should be studied upon its individual merits.

10. The direct paternal transmission of syphilis, without preliminary infection of the mother, may be classed among the most conclusively established facts of medical science.

11. It is, therefore, a dangerous doctrine to teach that the sole risks a syphilitic man introduces into marriage consist in the contagious accidents he may bear upon his person.

12. The arbitrary designation of a limit of three, or at most four years, as perfectly safe for a syphilitic man to marry, with or without treatment, irrespective of the actual existence of specific lesions, is unwarranted by science or the teachings of experience.

The conditions of admissibility to marriage formulated by Fournier are much broader, more scientific, more safe. These demand a mild or medium type of the disease, an advanced age of the diathesis, three or four years at the minimum, and a prolonged immunity, eighteen months to two years, from specific accidents ; if these guarantees of safety are further fortified by sufficient specific treatment, a reluctant consent is given ; marriage is tolerated rather than advised.—*Jour. Cutaneous and Genito-Urinary Diseases.*

INFANTILE DIARRHŒA.

The key to the solution of the problem of infantile diarrhœa lies, I think, in a knowledge of the conditions for the development of micro-organic life. The tissues of infants are of course much more susceptible to the inroads of organic action than those of adults, and we have it on the highest authority that some forms of life are developed in

the intestines as the result of fermentative processes, or at any rate that they are frequently found; and that they are often found in sub-epithelial spaces, and even in deeper portions of the mucous membrane. This, I am of opinion, from my experience in the treatment of children's diseases, will be found to be of much more frequent occurrence in them than in adults.

I divide the diarrhœa of children, as I do that of adults, into the acute and chronic forms. In the acute form a little carbolic acid with spirits of ammonia as a diffusible stimulant, and with or without grain doses of chloral and minim doses of belladonna, will cure the most urgent cases in a few hours. Thus—

℞ Spiritus ammon. aromat. . . . ℥ j.
Sol. acid, carbol. . (1 to 20), ℥ iss.-℥ iij.
Chloral. hydrat, . . . gr. xv.-xx.
Tinct. belladonnæ . . . . ♏xv.-℥ss.
Syrupi . . . . . ℨ ss.
Aquam ad. . . . . ℨ ij.

M. ft. mist. One teaspoonful every two hours. This mixture cures by the direct antiseptic or antifermentative action of carbolic acid.

In the chronic forms, *i. e.*, those which have existed for more than a day or two, the employment of a *remote* antiseptic is required, for the destruction of those low forms of organic life which have penetrated into the deeper layers of the mucous membrane of the intestine, and which cannot be reached by the *direct* method.

The biniodide of mercury disolved in iodide of potassium answers admirably for this purpose. I prescribe as follows:

Remote antiseptic or germicide—

℞ Solutionis hydrarg. bichlor., . . ℥ ij.
Potassii iodidi, ... gr. x.-xv.

Direct antiseptic—

Sol. carbolic (1-20), ... ℥ij-iij.

Diffusible stimulant—

Spirit. ammon. aromat., . . ℥ ss.-℥ j.

Sedative—

Chloral hydrat., . . . gr. x v.-xx.
Tincturæ belladonnæ, ... ♏ xx.

Vel.—Tr. camphoræ co. ℨ ss.— . ℥ j—*Sedative.*
Ferri ammoniæ citratis, gr. xv.—*Tonic.*
Syrupi ad. . . . . ℨ ij.

Misce. Fiat mistura. Signetur: Capiat cochleare unum parvum tertiis vel quartis horis.

I use chloral and belladonna in the more acute cases, and the compound tincture of camphor in those of a very chronic nature, or where there is much pain complained of.

This treatment is also of much service in some cases of diarrhœa in adults, in larger doses and of course with stronger sedatives. I do not at the same time overlook the fact that injudicious feeding of infants is the cause of much mischief. I give instructions in all cases to feed the child at intervals of three hours only, and between the times to give it toast water.—Dr. Illingworth, in *Med. Press.*

Homœopathy, as Regarded by One of its Leaders.—Jousset, of Paris, is unquestionably one of the lights of homœopathy on the Continent of Europe. His recently published *Leçons de Clinique Médicale* is in some respects a model of its kind. According to this authority, the homœopath of to-day no longer affirms the mysterious potency of the globule, or the all-sufficiency of the doctrine of similars, but claims to be in the true sense of the word, eclectic.

"Hahnemann and his pupils," he says, "pretended that homœopathy was the whole of therapeutics." This is a complete misconception of the case—homœopathy is but a part of therapeutics; this is a truth which has cost us many execrations from men in our own ranks, but is now held to be indisputable.

The fact is that homœopathy cannot take the place of palliative medication: nor of surgical medication; nor of antidotal medication in cases of poisoning; nor of parasiticide medication, wherever clearly demanded; nor of medication by mineral waters, which often cures where other modes of treatment fail; nor of hydro-therapeutic medication; nor of medication by electricity; nor even altogether of empirical medication. Homœopathy is not everything, and liberal medicine must include all collateral modes of treatment.

Jousset repudiates the allegation that homœopathy is a sect, and affirms that it is simply a branch of medicine which has to do with the therapeutics of certain internal disorders, and not even all of these are amenable to treatment by the law of similars (for example, helminthic diseases). The same writer, who seems to have some following in France, and may be said to represent the advanced thought of his school, gives some pretty hard blows at the advocates of infinitesimal doses, who he intimates have brought discredit upon homœopathy, and affirms that "the school of high dilutionists is losing ground every day, and in France, as in Germany and America, the general tendency is to employ the low dilutions."—*Boston Med. and Surg. Jour.*

Influence of Drugs given to Nurses on their Suckling Infants.—Dr. Fehling (*Les Nouveaux Remèdes*) discusses this subject and says: 1. *Salicylate of Sodium:* Dose varying between thirty and forty-five grains. Whenever the child is put to the breast one hour or less after the administration of the drug, the salicylate of sodium can be found in the child's urine. After the ex-

piration of twenty-four hours, no traces of it can be found in the urine. The elimination of the drug terminates simultaneously in nurse and child

2. *Iodide of Potassium:* The same results are obtainable. The milk, if analyzed, gives the characteristic reaction. In the child, the elimination lasts seventy-two hours; in the nurse, forty-four hours.

3. *Ferrocyanide of Potassium:* The reaction is very distinct in the urine of the nurse, but never in the child's urine.

4. *Iodoform:* After prolonged application of iodoform upon wounds of the vagina or vulva, iodine can be recovered from the milk and urine of the nurse, but wholly absent in the child's urine.

5. *Mercury:* The transmission of mercury from the nurse to the mother is very slight and inconstant.

6. The influence of the nurse's diet on the child is illusory; nurses can with impunity eat sour articles (lemons, vinegar) without thereby influencing the child.

7. *Narcotics:* (*a*) Tincture of opium in twenty to twenty-five drop doses. Thornhill claims to have observed a prolongation of the sleep in infants, while Fehling saw neither prolongation of sleep nor constipation resulting from it. (*b*) Hydrochlorate of morphine. The drug given in medicinal doses does not influence the child. (*c*) Chloral. Dose, fifteen to forty-five grains. Average length of sleep produced in nurse, two hours. No effects on the child are observable if it is strong and vigorous. If the child is weak and possibly born before the full term, it is advisable to wait two hours after administration of the drug to the nurse before allowing it to suckle. (*d*) Sulphate of atropine. Injected in the usual doses hypodermically in the nurse, the drug produces very distinct physiological effects in the child. The dilatation of the pupils taking place in the child does not disappear before twenty-four hours; hence, minute doses of the drug exclusively are permissible. —*Therap. Gaz.*

NEW TREATMENT FOR PHTHISIS.—A new method of treating phthisis has been proposed, but apparently as yet but slightly tried, by Professor Kremianski, who read a paper on the subject at the recent Moscow Medical Congresss, which provoked a good deal of discussion. The idea is pased, firstly, on the fatal effect of the most dilute solution of aniline on Koch's bacillus, and, secondly, on the fact that aniline seems to be but slightly, if at all, poisonous to the human body. Professor Kremianski proposes to introduce aniline into the lungs, and, indeed, the circulation generally, by inhalation, so that the phthisis bacilli should de bathed in a very dilute solution of aniline, wherever they may be. This, he thinks, would kill them, and render even pulmonary cavities free from bacilli, so bringing them into the condition of healthy granulation ulcers, which may be expected to cicatrise. A committee has been appointed, including Professor Subbotin and Ostroumoff who expressed themselves at the meeting as strongly opposed to the plain, for the purpose of observing Professor Kremianski's propose experiments in one of the Moscow hospitals. Two cases in which the aniline treatment had been successfully tried were detailed. A lad of eighteen, who had undoubted phthisis, was ordered a four-drop dose of aniline (but took by mistake three times the proper quantity) combined with nux vomica, mint water, and antifebrin, his diet being, good, including dried meat, kvas, and oranges. He was also given inhalations of atomised aniline. A remarkable change took place almost immediately, all the râles disappearing; his temperature, respiration, and pulse becoming normal. His skin, however, assumed a slightly blue tinge, but whether this was as permanent as the cure is represented to have been is not stated. The second case was a complicated one, there being tubercular peritonitis and meningitis, together with typhoid fever, present at the same time as pulmonary phthisis. Aniline inhalations, washing out the pulmonary cavities with corrosive sublimate and antifebrin, were employed ,together with a special acid diet, as in the other cases. Here, too, the results are said to have been remarkably good, the bacilli disappearing from the sputum, and the patient regaining his health entirely. No mention is made in the abstract published by the *Vrach* of any change of colour in this patient's skin. Amongst the various replies that were made to Professor Kremianski, Dr. Zakrzhevski, of Helsingfors, remarked that, admitting the fact as stated, still there was nothing to show that the aniline had been the cause of the cure. He himself had had surprisingly good results in phthisical cases, the disease becoming completely arrested by simply giving increased nourishment and prescribing antipyrin.

ON THE USES OF BORIC ACID.—Dr. J. T. Searcy, in the *Atlanta Medical and Surgical Journal*, writes enthusiastically in praise of boric acid, which as an antiseptic, he says, is better than iodoform, besides being cheaper. The best shape in which to use it is as an impalpable powder. Open wounds, before they are closed, may be freely dusted over with this powder, and compound fractures may be so treated, with often the happiest results. No application so effectually destroys the offensiveness of foul sores. Cancerous and other ulcers are benefited by boric acid, in combination with iodoform or not. It makes an excellent injection for gonorrhœal inflammations, in the strength of ten grains to the ounce of water for

the urethra, and half an ounce to the pint of hot water for the vagina. Eczema, both in its moist and in its dry stages, is helped by it, as a rule. Dusted finely on itching surfaces, it proves usually a very grateful application. It is almost a specific for ringworm; moisten the surface first, and with the wet hand, or a piece of sponge, rub the powder into the skin firmly once or twice a day. All itching is soon allayed, and the part gradually gets well. Persons troubled with offensive secretions of the axilla or the feet, will find this a very efficient and safe application. A combination of iodoform one part, boric acid two parts, vaseline four parts, makes an excellent ointment for venereal sores.—*Boston Med. and Surg. Jour.*

Peripheral Neuritis in Tabetic Patients.—Pitres and Villard. *Neurological Review* (*Revue de Médecine.*)

1. The peripheral nerves of tabetic patients are very often the seat of neuritis.

2. The neuritis of tabetic patients does not differ in any essential respect from other forms of the non-traumatic affection.

3. Their topographical distribution in the body is variable, for the neuritis may attack the sensitive and mixed nerves and the visceral.

4. In the majority of cases, but not always, the disease begins at the outer extremity of the nerve.

5. Their extent and gravity have no constant relation in respect to age, or the extension or depth of the medullary regions of the locomotor ataxia.

6. It is probable they do not play any part in the production of the specific symptoms of tabes; such as, the lightning-like pain, inco-ordination of movememts, abolition of patellar reflex, disorders of the muscular sense, etc. These latter symptoms depend rather upon the condition of the posterior columns of the cord.

7. Certain inconstant symptoms, however, which are added to or complicate the symptomatology of tabes, appear to depend upon the peripheral neuritis; such, for example, as anæsthetic spots in the skin, localized trophic disease of the skin and its dependencies, certain localized motor paralysis, accompanied or not by muscular atrophy, isolated joint affections visceral crises, etc.

The Treatment of Asthma.—If any drug deserves the title of specific in this affection it is potassium iodide. The remedy was first recommended in asthma by Trousseau, but this use of it fell into oblivion for a number of years, to be only recently restored by the publications of Leyden and Germain Sée, the latter of whom recommends its administration with lactucarium. Potassium iodide is of great service, also, in the purulent bronchitis which occurs as a sequel to asthma. In many cases of this condition the various balsams are efficacious, and Lubinski has observed excellent results from the use of Peruvian balsam combined with myrrh, the former in doses of from a grain and a-half to three grains three or four times a day. If there is really a nasal affection, it should be treated according to its character, and not on any far-fetched theory of its etiological importance. But, in the treatment of asthma, it is of the greatest moment to distinguish true, or primary, asthma—by no means a common affection—from that which is secondary to disease of the heart or lung. We need scarcely say that we have had only the former in view in this writing.—*N. Y. Med. Jour.*

Phimosis in Infancy.—In the *Lancet*, Dr. Hett contributes a few remarks on the subject of phimosis in infants. The author suggests the following rule for those who take charge of midwifery cases: To examine every male child within a few days of birth, and if the prepuce can not be retracted by the exertion of a moderate amount of force, to perform circumcision on or about the eighth day after birth. Many an unfortunate little boy is credited with bad temper, and punished for naughtiness, whose irritability is due to neglected phimosis. There is also much reason for thinking that the old habit of masturbation is frequently led up to by a morbidly excitable condition of the sexual organs due to phimosis. Circumcision may be performed by seizing the extremity of the prepuce between the finger and the thumb of the left hand, drawing it well forward, and slicing it off diagonally downward and forward, just in front of the glans. The mucous membrane should then be split along the dorsum, quite up to the cervix, turned back, and retained in position by a narrow strip of dry lint wrapped firmly three or four times round the penis. No sutures are necessary. The lint can be removed in a few days, when generally the wound is quite healed.—*Compend Med. Science.*

Treatment of Gonorrhœa.—(1) Fully explain to the patient the inefficiency of popular remedies, and the dangers attending their use. (2) Secure absolute personal cleanliness, thereby preventing infection of other parts, and insist upon as nearly perfect rest in bed as the exigencies of the case will permit. (3) Soak the penis frequently in water as hot as can be borne, but more especially during the act of micturition. (4) Recommend milk as a diet, and prescribe alkaline diuretics and mineral waters as internal medication. (5) Secure absolute freedom from sexual intercourse and from thoughts associated therewith.

Perfect faith in, and obedience to these simple formula, he insists, will insure a suceessful ending of all uncomplicated cases before the beginning of the seventh week.—Dr. Otis, in *Med. & Surg. Rep.*

Papine.—Dr. Thos. Little, of Spirit Lake, Iowa, in comparing Papine with other forms of opium, says: "I have been using Papine for the past two months. It meets the requirements of a class in which opiates are indicated, but in which the 'remedy is worse than the disease.' One case in particular has given me a great deal of trouble for years. I have tried opium in every form, and many other narcotics, alone and in combination; but constipation, nausea and nervous prostration have been the invariable results. Some two months since I obtained some Papine and commenced on this case with the happiest effect; no nausea, no constipation, no prostration. I have been prescribing it in my practice since with the greatest satisfaction to myself and my patients."

How Dr. Oliver Wendell Holmes relieved his Asthma.—In the first instalment of Dr. Holmes' entertaining article in the *Atlantic Monthly* for March, giving an account of his trip to Europe, the experiences of the writer in overcoming his attacks of asthma are related. All kinds of prescriptions were showered upon him, but Dr. Holmes announces that nothing did him so much good as a certain patent asthma-cure made in Providence, R. I. The composition of this is said to be:

℞ Pulv. lobelia,
Pulv. stramoniæ fol.,
Pulv. potas. nitrat.,
Pulv. black tea . . . . āā ℥ ij

M. and sift.

Some of this is burned and the smoke inhaled.—*Med. Record.*

Salicylic Acid and Iron in Rheumatism.—Dr. George L. Peabody treats his cases of acute articular rheumatism in N. Y. Hospital with the following combination:

℞. Acidi Salicylici . . . . . gr. xx.
Ferri pyrophosphatis . . . . gr. v.
Sodii phosphatis . . . . gr. v.
Aquæ . . . . . ℥ ss. M.

The dose which is described in this formula is given every two hours until improvement justifies diminution in the frequency, or until constitutional effects are pronounced.—*Epitome*

Inebriety.—The French Journal of Hygiene estimates the probabilities of life for moderate drinkers and total abstainers as follows: A moderate drinker at twenty years of age may expect to live about fifteen years; at thirty, twelve years; at forty, ten years; at fifty, eight years. The hope of a total abstainer is, at twenty years, forty years of life; at thirty, about thirty-six years; at forty, about twenty-sight years; at fifty, twenty-one years; at sixty, fifteen years.

Bismuth Subiodide.—This is intended to replace iodoform. Iodine fused with bismuth forms bismuth iodide. Boiling the latter with water leads to the precipitation of the subiodide as a fine powder. It, like iodol, is said to be inodorous, and yet to be equally as effective as iodoform as an antiseptic.—*London Lancet.*

Agaricin for Night Sweats.—Young recommends the following combination: ℞. Agaracini, gr. viij; pulv. ipecac et opii, gr. cxx; althæ pulv., and mucilag. acaciæ, āā, gr. lx. M. et div. in pilnlæ, No. 100. S. One or two to be taken at night.

In the Bellevue Hospital the following combina- has been used with excellent results: ℞. Agaracini (Merck's) gr. x; Atropinæ sulph., gr. i; acidi. sulph. arom. M 1200. M. et filter. Dose, 10 minims contain $\frac{1}{10}$ of a grain of agaricin, $\frac{1}{120}$ of a grain of atropine sulphate, and 10 minims of aromatic sulphuric acid. To be given in syrup or simple elixir.—*American Druggist.*

Sir Henry Thompson appeals to the medical public in protest against the use of his name in the advertisements of Friedrichshall mineral water, which he named once in a lecture, twenty years ago, with approval. This was when there were only one or two laxative mineral waters in England, and he no longer endorses the original statement. But the advertisers persist in the use of his name, and he cannot help himself except by an occasional disclaimer in medical journals.—*Boston Med. and Surg. Jour.*

Dujardin on an Eyelash in the Anterior Chamber.—The patient had received an injury to the eye and a woued of the globe. By oblique illumination a foreign body was seen directed vertically in the outer part of the anterior chamber of the left eye. The upper end of the lash was slightly curved. The author could find but twenty-nine such cases on record.—*Jour. des Sci. Med. de Lille.*

Press me closer, all mine own,
Warms my heart for thee alone.
Every sense responsive thrills,
Each caress my being fills;
Rest and peace in vain I crave,
In ecstacy I live thy slave;
Dower'd with hope, with promise blest,
Thou dost reign upon my breast;
Closer still, for I am thine,
Burns my heart, for thou art mine,
Thou the message, I the wire,
I the furnace, thou the fire;
I the servant, thou the master,
Roaring, red-hot mustard plaster.

—*Burdette.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet, Toronto."*

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The LANCET *has the largest circulation of any Medical Journal in Canada.*

DEATH FROM CHLOROFORM.

How often we hear the remark, when a fatal result has taken place in the administration of an anæsthetic, that "such a small quantity was given." It is a matter of surprise to the public at large, and we believe to not a few in the profession, that "only a few whiffs" are sufficient to produce death. Now, that such ideas hold their place among the laity is not to be wondered at, but when medical men speak, and even write with the idea that small quantities of an anæsthetic are safer for an operation than profound anæsthesia, it is desirable that a clearer comprehension of the danger of anæsthesia in operations be generally had. Much has been said of the relative safety of the two agents, chloroform and ether. Statistics, as commonly given, do not take into account the fact that chloroform is so much more frequently employed than ether, in Europe at any rate, and the bare fact that a certain number of deaths from each occurs during a stated period of time gives the reader little insight into their relative safety: but of this we have no occasion to speak now.

Our object is to make clear the fact that for the simplest operations, even for the extraction of a tooth, complete anæsthesia should always be induced.

The danger of anæsthetics are chiefly three, viz: paralysis of the respiratory centre, from an overdose, paralysis of the heart, from a too concentrated chloroform vapor, and a "combination of chloroform narcosis and *shock*." As to the first two conditions, they should never occur, and in reality we believe the third is the true cause of the great majority of fatal cases. Now this condition of shock is caused commonly by *incomplete anæsthesia*, and the fatal issue is the result, not of the too liberal use of the anæsthetic as is commonly supposed, but of its too sparing use.

When a painful operation is performed without any anæsthetic at all, the irritation being reflected through the pneumo-gastric tends to cause stoppage of the heart, and a consequent condition of syncope, while at the same time, the same irritation causes, also reflexly, contraction of the arterioles. This raises the blood pressure and thus counteracts the tendency to syncope, caused by the action of the vagus.

Now chloroform does not paralyze all the reflexes at the *same time*, the centre for the arterioles being affected early in the administration, and sooner than the vagus. When a small amount of an anæsthetic has been used then, the reflex centre for the arterioles is paralyzed while the vagus is not affected, or is at any rate but little affected, and the consequence is that the balance between these two counteracting nervous mechanisms is lost, and under the influence reflected through the still vigorous vagus, the heart tends to stop, and not being spurred on by the increased blood pressure, syncope occurs, which may or may not prove fatal. When, however, complete anæsthesia has been induced, the irritation of the sensory nerve, by the operation affects neither the pneumo-gastric nor the centre for the arterioles, both these reflexes having been abolished, and herein lies the safety of complete anæsthesia, namely, the absence of any such untoward effect upon the heart as has been mentioned above, that is the absence of shock. This being understood it is clear, why, even in the most trivial operation, the anæthesia should be perfect. Not even the extraction of a tooth should be attempted while the patient is only partly anæsthetized. As a matter of fact a large proportion of deaths from chloroform occur during the extraction of teeth, for which short and simple operation, complete anæthesia is not considered necessary. Ether seems less dangerous than chloroform, when used sparingly, a fact which may be accounted for by its more equal action upon the centres, all being paralyzed by it more nearly

at the same time, and in the same degree than is the case with chloroform.

If then all anæsthetists would insist upon complete anæsthesia before even the simplest operation was proceeded with, we should hear less frequently of the fatal results of "a few whiffs," when death is not really due to the use of the anæsthetic, but to the shock, consequent upon its not being pushed far enough before the operation was begun.

NEW MEDICAL SCHOOL.

A few remarks as to the proposed new Medical Faculty in Toronto University will be pertinent at this time, though perhaps the profession in the country at large is not so deeply interested as some few in Toronto would have us believe. With two efficient medical schools in full blast, many may think the necessity for the establishment of a third is out of the question. Neither Trinity nor Toronto school seems willing to forego the advantages they now possess, and surely the number of men who are being qualified every year is sufficient. As to the efficiency of the medical schools now in existence here, the rank their graduates hold both in the United States and Britain, is an assurance that they are not inefficient. Canadian graduates are generally looked upon in England and Scotland as being well up in their work so far as college training goes, but as a rule have not the same practical knowledge as their confrères who have spent their entire college course at one of the large hospitals in London or Edinburgh. Now the establishment of a new college cannot, so far as we can see, increase the facilities of our students, for clinical instruction or observation. A considerable difficulty in this matter is, that any such establishment of a medical faculty in connection with the University, would *practically* put an end to the affiliation of other medical schools with that institution, which would we think be a misfortune, as regards medical education in this Province. Again, the proposition that the University shall borrow the funds necessary to equip the new school, will not we fear meet with general approval. With two established schools in Toronto, it would be a long time before such a debt would be cleared off, if the fees of the students were the only means at the disposal of the faculty for that purpose.

The existing medical schools have been steadily improving year by year in attendance and equipment. The members of the Faculty of Trinity Medical School alone have spent ten thousand dollars within a short time, in increasing the efficiency of their school. And other schools have been working in the same spirit, so that, to-day, medical education in Ontario is, to say the least, on a solid basis, and such as we need not be ashamed of.

The number of students in medicine, presenting themselves for degrees at Toronto University, has been comparatively small of late years. But this is due largely to the fact that certain subjects are required by the University, which are not in the curriculum of the Medical Council. Any one who knows what the burdens of a medical student's life are, will readily understand, that few indeed are the individuals who will add to their own burdens, or will shoulder those which may be avoided. Comparative anatomy is all very well, and the more a man reads the broader will be hie field, but we hold that the mass of medical students in Canada are not in a position to read science for the sake of science, and that the time now required to be spent on biology might be better spent in, say, human anatomy, as indeed it is so spent by all other students than those whose love for Toronto University impels them to accept this additional work, for the sake of possessing her degree, a number, which we are sorry to say, is very small. It is easy for those who have not gone through the work required of a medical student, to philosophize and point out the advantages and beauties of science, etc., but those who have gone through the said work *know*, that with such students as are now coming up for medical education, it is not wise to require this additional work. Let the Senate assimilate the Medical Curriculum of the University to that of the Medical Council, and continue to examine as heretofore in medicine; and there will be no lack of students from every affiliated school, who will be only too glad to present themselves for her degrees in medicine.

CONSERVATIVE SURGERY.

Conservative surgery has been the text for many editorial sermons, and yet it is a fit subject for the pen. Verily there are surgeons and there are sur-

geons. Since our advent into the profession, we have found that there are two schools of surgeons. One in which the underlying principle is the welfare of the patient first and always, without regard for anything else, and certainly far removed from mercenary motive. The other is characterized by what is commonly called bold, daring surgery. Its members being men who look always to their own interests, who have more consideration for the fee than for the welfare of the patient. We have witnessed these so-called surgeons perform operations which were totally unjustifiable, and often uncalled for. We have known operations to have been undertaken when there was not the slightest possible chance for the patient to be benefited. In these cases the operation was performed in order to obtain the fee, and to impress the laity with the boldness and fearlessness of the surgeon. There are cases occurring every day in which limbs, eyes and lives are sacrificed because the surgeon in attendance was desirous of operating, and shut his eyes to all methods of treatment other than the knife. That such things as these are wrong, and that they are detrimental to the whole profession and science alike, there is no doubt. We take it that a surgeon should not be bold and daring. Let him rather be timid. Let him have a due regard for the feelings of his fellow man, and hold at as high a price the lives and limbs of his patients as he does his own. Let him be slow to mutilate by the removal of a member, and when by all authority, by his experience, and upon his honor as a humanitarian, it is necessary to remove a part, then he can be bold and daring without discredit to his calling. The surgeon who will operate simply to gain the fee and credit for the performance of an operation, when he is not positive that he thereby increases the chances for life, or relieves suffering, is unworthy the name of surgeon, and is a discredit to his noble science.

Professor Verneuil says: "Of one hundred possible operations, twenty are imperatively necessary, twenty are absolutely inadmissible, and the remaining sixty may be performed or not according to circumstances, and surgeons may and do err in each of these classes of cases."

The death of Dr. Arthur Farre, F.R.S., London, Eng., at the age of 75 years, is announced in our exchanges.

ONTARIO MEDICAL ACT AMENDMENTS.

The Committee of the Medical Council has at length succeeded in carrying through the House certain much needed amendments to the Ontario Medical Act. We congratulate the Council and the profession of Ontario upon the fact that power and authority have been given to deal with those registered practitioners who disgrace the profession of medicine by unseemly advertisements, and the most flagrant quackery. It was certainly not asking too much from the legislature to give power to the Council to exercise some wholesome discipline upon members who are "guilty of infamous or disgraceful conduct in a professional respect." The Law Society has had for years a somewhat similar provision on the statute book, and has acted upon it from time to time when necessity arose, and no injustice can be shown to have been done to the humblest member in consequence. So we trust it will be with regard to the power given to the Ontario Medical Council. We have not the slightest reason to fear that this power will ever be abused, but rather that it may become a dead letter, owing to the difficulty of defining what shall and what shall not constitute "infamous and disgraceful conduct." The penalty to be inflicted upon any licensed practitioner found guilty of the above charge shall be the erasure of his name from the Register of the College. For the purpose of exercising this power, the Council shall appoint a Committee of their own body, consisting of five members, three to constitute a quorum. Power is given the Committee to call witnesses, examine the same under oath, to cross-examine and otherwise to constitute itself a court of competent jurisdiction for the purposes of the Act. The right of appeal to any judge of the High Court of Justice, for Ontario, within six months from the date of erasure of his name from the Register, is given the defendant.

Clause I. of the Act, in reference to College representation, has been amended by enacting that only those colleges which shall establish and maintain a Medical Faculty in connection therewith, shall be represented in the Council. Another important clause has been added, viz.: that no registered medical practitioner shall be liable in any action for malpractice unless such action be commenced within *one year* from the date of such

professional services. The clause of the Bill relating to the payment of medical witness' fees at the rate of $5 per day and mileage was struck out on the third reading. It was objected to on the ground that it was class legislature.

TRINITY UNIVERSITY, TORONTO. — M.D., C.M., Jas. McLurg, *Gold Medal;* J. B. Reid, *Silver Medal;* A. Bradford, A. E. Yelland, H. C. Phillips, O. G. Niemeier, J. M. Thompson, W. J. Stevenson, B. Hawke, H. R. McCullough, A. Lawson *(Honors).* A. D. Graham, A. J. Stevenson, W. A. Fish, W. A. Shannon, eq.; C. H. McLean, C. R. Staples, J. H, Hoover, M. J. Keane, D. Mitchell; W. Newell, R. R. Hopkins, W. D. Scott, eq.; R. McLennan; L. P. Booth, S. H. Quance, eq.; A. Y. Scott, *70 per cent.* W. Babbitt, J. C. C. Grasett; F. O. Lawrence, M. J. Glass, eq.; T. A. Amos, U. N. Thornton, D. P. McPhail, A. Thompson, R. R. Ross, J. A. Phillips, J. W. Shillington, A. E. Mackay, J. W. Ross, Mrs. A. L. Pickering, A. B. Foster, E. Clouse, F. L. Shaffner, E. Spencer, W. B. Nesbitt, *60 per cent.* A Myers, T. S. Phelp, W. H. Clarke, Miss A. McLaughlin, D. Bechard, P. J. McDonald, D. W. Kester, *50 per cent.*

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TRINITY MEDICAL SCHOOL.—*Fellowship Degree*: A. E. Yelland, *Gold Medal*; Jas. McLurg, *1st Silver Medal*; W. C. Scott, *2nd Silver Medal*; J. M, Thnmpson, A. Bradford, W. Newell, C. R. Staples, A Lawson, D. P. McPhail, M. J. Stevenson, O. G. Niemeier, A. Thompson, *Certificates of Honor.* T. A. Ames, W. Babbitt, E. Clouse, W. A. Fish, J. C. C. Grasett, A. D. Graham, R. R. Hopkins, S. H. Hoover, B. Hawke, D. A. Kidd, F. O. Lawrence, H. R. McCullough, A. Myers, R. McLennan, D. Mitchell, T. S. Philp, H. C. Philips, J. B. Reid, J. W. Ross, A. J. Stevenson, F. L Schaffner, W. A. Shannon, W. N. Thornton.

Primary. J. M. McFarlane, J. Crawford, H. W. Armstrong, H. Becker, H. C. Elliott, J. H. C. Fisher. G. K. Mark, W. J. Milne, H. D. Quarry, W. R. Wade, J. G. Wiley *(Honors).* W. E. Harding, J. R. McCabe, J. P. Ogden, H. A. Turner, *70 per cent.* U. E. Bateson, W. W. Birsall, John Brown, P. Brown, H. Chapple, D. K. Crossthwaite, A. T. Emerson, F. F. Ferguson, J. M. Henwood, W. Kerr, D. McLeod, T. J. McNally, J. M. G. Millman, T. J. Moher, H. J. Mullen, W. W. Nasmyth, T. C. Patterson, J. T. Rogers, D. A. Rose, F. G. Saulter, R. J. Wade, H. W. Wilson, *50 per cent.* J. C. Auld, T. G. Batemau, O. M. Berdan, M. C. Dewar, H. C. S. Elliott, T. A. Fitzgerald, F. H. Johnston, A. J. Macaulan, H. Mason, J. H. McFaul, jun., T. C. Patterson, A. E. Wills, R. J. McDonald, W. L. Bain, E. R. Bishop, J. Cowan, J. D. Deacon, A. E. Edgar, C. H. Hamilton, E. S. Jackson, H. W. Jeffs, J. H. O. Marling, P. J. McDonald, J. H. McFaul, sen., A. McMeans, B. Z. R. Milner, *50 per cent.*

Scholarships.—First Year: F. C. Clarke, *1st Scholarship*, $50; C. B. Carveth, *2nd Scholarship*, $30; J. N. Sifton, *3rd Scholarship*, $20. *Physiology Prize;* C. B. Carveth, $25. *Second Year:* J. M. McFarlane, *1st Scholarship*, $50; J. Crawford, *2nd Scholarship*, $30.

MCGILL UNIVERSITY, MONTREAL.—M.D., C.M., E. Evans, *Holmes Gold Medalist;* H. A. Lafleur, *Prizeman;* J. Creasor, *Sutherland Gold Medalist;* A. F. Garrow, *Prizeman in the Primary;* W. H. Abern, J. A. Berry, E. H. Blackader, S. W. Boone, W. Bowen, Jay Boyd, K. Cameron, W. Christie, A. M. Cowie, J. A. Dickson, C. L. Easton, C. J. Edgar, W. E. Ellis, E. J. Evans, J. D. Flagg, E. W. Fillmore, J. M. Fraser, A. W. Gardner, A. G. Hall, W. Hall, A. L. Hamer, J. W. Johnson, J. A. A. Kelly, A. M. Lafferty, H. A. Lafleur, W. F. Loucks, A. D. Macdonald, A. L. McDonald. D D. McDonald, H. McKinnon, V. H. Morgan. T. J. Norman, J. A. Porter, J. C. Potheir, E. Reavely, G. C. Richardson, D. L. Ross, J. M. Scott, D. J. Scully, G. C. Stephen, H. E. Trapnell, P. H. Warneford, H. P. Wilkins, E. P. Williams, A. A. Young.

VICTORIA UNIVERSITY.—M. D., C. M., O. R. Avison, J. Appelbee, J. J. Brown, J. M. Cameron, D. A. Dobie, H. P. Galloway, T. H. Halstead, J. A. Palmer, W. R. Shaw (*Honors*). W. Armstrong, S. G. Barton, J. Bell, A. E. Collins, C. R. Charteris, E. Campbell, W. H. Clapp, E. J. Free, W. R.

W. J. Glassford, O. Groves, A. J. Hunter, H. R. Hay, M. J. Mullock, J. H. McCasey, A. M. McFaul, C. F. Moore, A. H. Perfect, P. J. Rice, D. Sinclair, G. H. Shaver, G. R. Stockton, J. C. Smith, G. Stewart, M. Tovell, W. J. Walsh.

Primary,—R. R. Anderson, J. A. Greenlaw, R. G. Howell, — Hart, A. G. Montgomery, S. T. Rutherford, H. Wallwin (*Honors*). W. Almas, J. J. Broad, W. C. Barber, J. A. Cross, J. Carruthers, W. Ogbert, W. H. Groves, W. C. Gilchrist, A. J. Harrington, A. H. Holliday, D. Henderson, S. McKibbon, J. A. Millican, D. McKay, J. C. Patton, J. H. Reid, J. A. Ross, A. J. Reynolds, F. N. Starr, P. W. Thompson, T. S. Webster, H. A. Yeomans, — Young.

**In three or more Subjects.*

Ontario Medical Association.—The meeting of this Association, in June, to be held in Toronto, is expected to be more than usually interesting. In addition to the gentlemen named in our last issue, the following have signified their intention of being present and taking part in the proceedings, Dr. Lett, of Guelph, "Relation of Insanity to Masturbation; Dr. Oakley, Streetsville, "Repair of Nerves," Dr. Price Brown, Galt, "Injuries to the Elbow Joint," Dr. Ryerson, Toronto, "Ophthalmic Epilepsy," Dr. R. W. Powell, Ottawa, "Pelvic "Hæmatocele, and Some Obervations on Diphtheria," Dr. Packard, of Philadelphia, "on The Views of some of the Surgeons of the Last Century and our views of them," Dr. Porter, of New York, "The Etiology and Pathology of increased body heat in Relation to Disease, and the use of Antipyretics." Others have been promised, but the subjects have not yet been sent in to the Secretary. The Annual Circular Letter will be sent out with the R. R. certificates next week.

Picrate of Ammonia in Malarial Diseases.—Dr. H. Martyn Clark (*Lancet*) says he has used the above remedy in India during the past four and a-half years with excellent results. He has treated over 10,000 intermittent fever cases with so much success that he has substituted it entirely for quinine and the alkaloids of cinchona. Out of 5,000 cases, of which a record was kept only nine were not cured by this remedy, which nine cases were however rapidly cured by quinine. He recommends half a grain four or five times a day in pill form as the average dose. He says: My experience leads me to the conclusion that in all varieties of intermittent fever, and in malarial neuralgias, picrate of ammonia is a valuable antiperiodic, and it is an efficient and perfect substitute for quinia. It has the following advantages over quinine:

1. It is much less expensive. This is an important consideration where, as in Indian practice, hundreds of cases of malarial diseases have to be treated annually.

2. The dose given is very much smaller.

3. It does not produce the unpleasant effects that quinine does—headache, deafness, tinnitus, etc.; nor does it disorder the digestion or cause nausea, as quinine is apt to do in the doses in which it has to be given in India. He regards it as inert in remittent fever, as also in the enlarged spleen of ague.

University College, London.—We call the attention of our readers who were educated at University College, London, to an appeal for funds to rebuild the Hospital, which appears in our advertising columns. Those who recollect the old building, will have no difficulty in understanding that it must be rebuilt, to enable it to provide for the increasing demands of the medical school. The Council of University College are resolved to build a hospital on an enlarged site, which shall be an exemplar in construction and arrangement for the treatment of the sick and the study of disease. It is in contemplation to dedicate a ward in the new building to former students of U. C. who are settled in the colonies, and to subscribe their names, in a long list it is hoped, in their memory. The number of patients treated has and is still increasing rapidly. The number of in patients in the last fifteen years has advanced from 1,600 to 3,000 annually; the out-patients from 8,900 to 12,700, and the casualties from 7,000 to 20,000 in the like period. We trust that old University College men will assist in the education of their successors, by liberally responding to the appeal of the Council.

Pruritus Ani.—Mr. Banks, of Liverpool, says: There is a method of treatment which I do not think is spoken of in books, but which I have tried in two or three cases with great success. This consists in anæsthetizing the patient, and then with the big bulb of a thermo-cautery, heated to a white heat, lightly running over the whole

affected surface so as to produce a superficial burn. This seems a rather severe remedy, but then the disease is sometimes a very dreadful one, and makes the lives of its victims almost intolerable. Now, the look of the cautery is much worse than the reality, and a bit of lint kept moist with a solution of carbonate of soda soon takes the smarting away. I do not know if others have tried this plan, but it is an excellent one, and may be resorted to with tolerable confidence in aggravated cases. Deep cauterization is not required; merely a superficial frizzling.

MORPHINE IN POST-PARTUM HEMORRHOIDS.—Dr. M. S. McMahan writes to the *N. Y. Med. and Sur. Jour.* that he has successfully used the following plan in post-partum hemorrhage for the last fifteen years. On finding the surface of the patient pale, the extremities cold, with profuse hemorrhage, he at once injects hypodermatically from ten to fifteen minims of Magendie's solution of sulphate of morphine. This will invariably, and within a few minutes, produce a flushed surface, warm extremities, and a stopped or much diminished flow. He adopts no other means—no styptics, no cold compresses, and no foolish plugging.

RAPID DILATATION IN DYSMENORRHŒA.—Rapid dilatation of the cervix by instrumental means, in cases of dysmenorrhœa and sterility, is strongly recommended by Dr. Goodell. He finds it much more satisfactory than tents. In one case where the dysmenorrhœal pain was so severe that two physicians were in attendance giving chloroform for forty-eight hours, a single dilatation effected a cure. "No serious symptoms," he says, "have ever followed, though the dilatation is carried to the extent of an inch or an inch and a quarter. In four or five cases lacerations have resulted, but never of sufficient magnitude to require a suture."

NOCTURNAL ENURESIS.—Dr. Harkin (*Prov. Med. Jour.*) says he has given up belladonna and potash in the treatment of the above, and has adopted derivatives and revulsives, such as dry and wet cupping. He applies a blister 3 inches long by 2 wide to the neck, *as close to the foramen magnum occipitale* as possible. The application of one blister is usually sufficient. He regards the emp. lyttæ or the lin. cantharidis as the best agents to use. In obstinate cases, as in adults, and especially in females, the process requires to be repeated after a few months, owing to a re-appearance of the trouble, and "dry or wet cupping may be requisite to complete the cure."

IMPURE ICE.—The New York State Board of Health, in a report on the dangers of contaminated ice, draws the following conclusions: Ice formed in impure water has caused sickness; it may contain from 8 to 10 per cent. of the organic matter dissolved in the water, and in addition, a very large amount of the organic matter that had been merely suspended or floating in it; it may contain living animals and plants, ranging in size from visible worms down to the minutest spores, and the vitality of these organisms may be unaffected by freezing.

EPISTAXIS.—Dr. Patrick says (*N. Y. Med. Jour.*) he has always succeeded in arresting the hemorrhage in epistaxis, by bandaging each thigh close to the body, tight enough to prevent the venous circulation, without interfering with the arterial; the arms may also be bandaged. The tension in the bleeding vessels is thus lowered by a large amount of the blood of the body being confined in the extremities, and the bleeding stops. The bandages should be left on long enough to allow pretty firm clotting to occur, and removed gradually and one at a time.

HAGER'S CATARRH REMEDY—The *Therap. Gaz.* gives the following: The formula recommended by Dr. Herman Hager is as follows: Of carbolic acid, ten parts; alcohol, ten parts; water of ammonia, twelve parts; distilled water, twenty parts. Take two-ounce wide-mouthed bottles, fill them to one third with the above liquid; then introduce a bunch of (absorbent) cotton of sufficient size to soak up all the liquid; to be used in incipient cold in the head, coryza, chronic catarrh, etc. A stronger preparation, also recommended by Dr. Hager, is the following: Carbolic acid, ten parts; oil of turpentine, five parts, ; alcohol twenty parts. To be used in the same manner as the preceding Hager recommends those as prophylactic against diphtheria He advises all those who handle and are about patients suffering from diphtheria or phthisis, to place a vial with this *olfactorium* to the nose when they approach the patient.

RADICAL CURE OF HYDROCELE.—Dr. J. K. Murray writes to the *Brit. Med. Jour.* that J. J., aged 70, had a hydrocele which had been tapped repeatedly during the last five years. On the last occasion iodine had been injected, but the fluid began to re-accumulate in less than a month. In

July, 1886, two drachms of pure carbolic acid were injected after tapping. There has been no re-accumulation yet, though four months have elapsed.

COCAINE WITH LANOLIN IN BURNS AND SCALDS IN THE SECOND DEGREE.—Dr. Ernest Wende recommends (*Buffalo Med. Press*) the following as grateful and cooling:

R.	Cocaini mur.	2 parts.
	Aq. destill.	
	Lanolini, āā.	17 parts.
	Cetacei, ...	4 parts. M.

SPECIFC FOR DIABETES.—The Paris correspondent of the *Lancet* writes, that M. Martineau recently stated that he has cured 67 of 70 diabetic patients whom he has had occasion to treat during the past ten years, by the administration of a solution of carbonate of lithia and arseniate of soda in aërated water, to the exclusion of all other drinks. The patient uses this at meals as at all other times.

TRANSMISSION OF CHOLERA FROM MOTHER TO FŒTUS.—Lizzoni and Cattani, of Bologna, says the *Brit. Med. Jour.*, have recently demonstrated the presence of the bacillus of cholera in the blood of a five months' fœtus, the mother having aborted on the third day of an attack of cholera. They hold that the transmission of cholera from the mother to the fœtus takes place by means of the blood.

LOCAL APPLICATIONS IN ERYSIPELAS.—Dr. Archangelski says he finds the following are efficacious in this disease. The remedies are arranged in the order of merit: (1) benzoic acid; (2) tincture of iodine and turpentine as an ointment; (3) sulphate of copper; (4) sulphate of iron; (5) oxide of zinc; (6) napthalin; (7) solution of the bi chloride 1 to 300; (8) chloride of zinc; (9) iodoform.

AN INJECTION FOR FŒTID LEUCORRHŒA.—The "Union Médicale" gives the following formula:

R	Potassium chlorate, . . .	13 parts;
	Wine of opium, ...	10 "
	Tar water, ...	300 "

Two or three tablespoonfuls are to be added to a quart of warm water as a vaginal injection and lotion.

A NEW PARASITE IN BEEF.—Wolf has found in the intermuscular connective tissue of the flesh of oxen a parasite which is apparently the larval form of an ascaris. It is encysted like trichinæ, but is somewhat larger, and is nearly spherical in shape

TEST FOR BILE IN URINE.—The *Med. Summary* says that a few drops of chloroform added to the suspected urine, and agitated, forms a ready, delicate, and certain test for bile. If none be present the test fluid remains limpid, but otherwise it becomes turbid, and acquires a yellowish hue, the depth of which is proportionate to the amount of bile present.

DYSMENORRHŒA.—Dr. Payne recommends (*Therap. Gaz.*) the following:

R.	Pulv. camphoræ, ...	gr. x.
	Pulv. Doveri, ...	gr. xx.
	Ext. hyoscyami, ...	gr. x.
		M. ft., pil. x.

SIG.—Two pills every two hours till pain ceases.

THREATENED ABORTION.—We take the following from the *Med. Reg.*:

R.	Morph. sulph., ...	gr. iss.
	Ext. viburn. prun., . . .	℥ iss.
	Vini portense, ...	℥ iss.—M.

SIG.—℥ii in water every hour.

AMENORRHŒA.—Dr. Poulet says the following is a very certain emmenagogue:

R.	Acidi Oxal.	gr. xxx.
	Syr. Aurant.	℥ ii.
	Aquæ, ...	℥ vi.

S.—℥fs ever hour.

LICENCE COMMISSIONERS.—The following gentlemen have been appointed Commissioners under the Liquor Licence Act, Ontario, in their respective districts: Drs. A. Robillard, A. McLean, P. McLaren, A. Rockwell, E. C. McNichol, J. McBain, C. M. Gould.

BISHOP'S MEDICAL COLLEGE, MONTREAL.—The following are the names of the recent graduates in medicine, W. E. Fairfield, R. Campbell, A. P. Scott, A. E. Phealan, J. M. Rœhler.

NITRITE OF AMYL IN AFTER-PAINS.—Mr. Kemble, writing to the *Lancet*, says he has had good results in after-pains by allowing the patient two or three

inhalations of nitrite of amyl when she felt the pain coming on. He has also used it in the sickness of pregnancy, and in obstinate cases of dysmenorrhœa, without a single failure or bad result.

WOMAN'S MEDICAL COLLEGE, TORONTO.—Dr. McPhedran has been made Dean of this faculty; Dr. Peters takes physiology, and Dr. J. Caven, pathology.

APPOINTMENT.—Dr. E. B. O'Reilly has been appointed House Surgeon to the Winnipeg General Hospital.

BRITISH DIPLOMAS.—Mr. George Snider Paterson, of Toronto, has recently passed the examination in the Science and Practice of Medicine, Surgery and Midwifery, of the Society of Apothecaries, London, and received a certificate to practise.

URTICARIA.—Lassar gives 24 grain doses of salicylate of sodium every 2 hours until 3 doses have been taken, and says he thus cuts short the attack of this troublesome malady.

BUMSTEAD relates that Ricord used to say to his students: "Gentlemen, if I am to go to—well—the bad place, I know what my punishment will be. I shall have a lot of fellows with the gleet standing round me with their lamentations, their importunities, and their prayers to make them well." Bumstead adds: "This *mauvais mot* but faintly indicates the annoyance which a case of gleet often gives both to patient and surgeon."

HYOSCINE has become a prominent remedy for diseases of the nervous system, particularly acute mania. It is a hypnotic and powerful sedative. The dose should be very small at the commencement of the treatment in nervous disorders, as some persons are quite susceptible to its poisonous influences. $\frac{1}{100}$ of a grain is a fair dose of hyoscine.

AN excellent local application (*Med. & Surg. Rep.*) for "swelled testicle" is a paste formed of equal parts of bismuth and water. It removes the pain at once, and gradually reduces the swelling.

DR. MENIERE gives an enema of warm water containing 30 grains of choral, for the violent pains which in some women precede the menstrual flow.

Books and Pamphlets.

A TEXT-BOOK OF PATHOLOGICAL ANATOMY AND PATHOGENESIS. By Ernst Ziegler, of Tubingen. Translated by Donald Macalister, M.A., M.D., St. John's College, Cambridge. Three parts complete in one volume; 289 illustrations. New York: W. Wood & Co. $5.50.

This may be said to be not only a new work, but also a modern one. A great part of the text is based upon observations made or verified by the author. Although somewhat dogmatic in style, it is upon the whole a most excellent treatise on this subject. Its value has also been greatly enhanced by the addition of references to the literature of the subjects discussed, and other addenda by the translator. The work is well illustrated, and will be found to be an admirable text-book for practitioners and students. We commend it to the favorable attention of our readers.

A COMPEND OF SURGERY FOR STUDENTS AND PHYSICIANS. By O. Horwitz, M.D., Dem. Anat., Jefferson Medical College. Third edition. Philadelphia: P. Blakiston, Son & Co.

A COMPEND OF OBSTETRICS FOR STUDENTS AND PHYSICIANS. By H. C. Landis, A.M., M.D., Prof. Obstet., Starling Medical College. Third edition. Philadelphia: P. Blakiston, Son & Co.

The above mentioned books are denominated "Quiz Compends," although the latter only is written in the style of question and answer. These works have received the most kindly criticism from the press, and the fact that they have passed through three editions within a short period, shows that there is a considerable demand for such compends. Some are utterly opposed to all compends, as tending to superficiality and cramming; and while this may be true to some extent, yet the fact remains, that much may be gleaned from small and convenient pocket companions, such as the compends before us. The work on surgery is very well illustrated for so small a work.

Births, Marriages and Deaths.

In Ingersoll, on the 20th inst., Dr. J. J. Hoyt, aged 65 years.

On the 15th February, F. D. Walker, M.D., C.M., of Cardigan Bridge, P.E.I., aged 26 years.

On the 9th ult., Dr. Benham, of Princeton, Ont., aged 50 years.

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Original Communications.

REMARKS ON THE TREATMENT OF GONORRHŒAL OPHTHALMIA.*

BY F. BULLER, M.D.

Professor of Ophthalmology, McGill University.

The developments of bacteriology have given a new impetus to the therapeutics of eye diseases, and especially to the search after remedies suitable for the cure of the more severe forms of inflammation of the conjunctiva. Of these, the acute purulent ophthalmia caused by contagion of gonorrhœal virus is undoubtedly the most dangerous and destructive. The severer cases of opthalmia neonatorum might, perhaps, all be placed in the same category, and although we still, unfortunately, meet with many cases of loss of sight in one or both eyes from this affection, it is something to know that such a result is almost always due to neglect or improper treatment, for in the hands of competent ophthalmic surgeons a cure of this disease without loss of vision is, as near as may be, a matter of certainty. Not so, however, in gonorrhœal ophthalmia of older persons. Up to the present time, so far as I can ascertain, no plan of treatment ever yet suggested will prevent great impairment or total loss of vision in a large percentage of such cases.

A review of the literature on this subject during the past five years would show an extraordinary divergence in the views of skilled therapeutists in regard to the treatment of this disease. Some use hot applications from the outset; others, constant cold applications until the inflammatory process is well on the decline. Some begin, continue and end with caustics and astringents; others eschew them entirely. Some employ caustics and antiseptics; others, antiseptics without caustics or strong astringents. Only on one point all are agreed; that is, the necessity for frequent cleansing of the diseased eye. And most are agreed as to the expediency of protecting the fellow eye by some mechanical contrivance, if only one be affected.

Latterly there is a growing tendency to employ such remedies as are known to have powerful antiseptic properties. A complete list of the remedies more or less in vogue on account of their supposed efficacy in this direction would be a very long one. I will mention only those I have seen most frequently recommended in current literature. They are quinine, chloral, boracic acid, oil of cade, resorcin, red oxide of mercury, peroxide of hydrogen, salicylic acid, salicylate of soda, iodol, binoxide of mercury, carbolic acid, iodoform, and perchloride of mercury. Of these, the last three take the highest rank, and in the order given. There are plenty of cases recorded where acute purulent conjunctivitis, treated chiefly by one or other of these agents, has terminated satisfactorily, and sometimes the cure has been astonishingly rapid, but as yet no one has dared to vaunt them as specifics; this could only be done after a long series of the most virulent cases had been treated with uniform success. Such a series has, so far as I am aware, never been published, and if it had, I, for one, would remain sceptical until positive proofs of its truthfulness were furnished. Nevertheless, I have strong hopes we shall achieve such a result in time. As yet, the treatment of conjunctival inflammations by so-called antiseptics must be regarded as a promising method still in its infancy. Assuming, for the sake of argument, that the various forms of conjunctivitis are characterized by, and perhaps dependent on, the presence of certain forms of micrococci, no one will pretend to say that we know all about these organisms from a therapeutic standpoint. What, for instance, are their differences in vitality or in their power of resisting germicide agents? Can we ever be sure of reaching them in such a structure as the conjunctiva so thoroughly as to destroy them without destroying the tissue in which they are working mischief. As long ago as 1881, A. Gräfe attempted to define the usefulness of antiseptics in diseases of the conjunctiva,

*Read before the Canadian Medical Association, at Quebec, August, 1886.

and recommended (1) as a prophylactic, (2) in the beginning of contagious affections, and (3) where the disease tends to a croupous or diphtheritic character rather than a simple blenorrhœa.

In, 1882 Lubrecht cleansed the eyes (in gonorrhœal and ophthalmia neonatorum) with dilute corrosive sublimate solution, and found it beneficial, though it did not check the disease.

In 1884, Reich recommended weak solutions of corrosive sublimate as a disinfectant in blenorrhœa and other contagious affections of the conjunctiva, but he used strong solutions (1 to 3 grains to the ounce) in the treatment of granular ophthalmia, washing off the lids before replacing them, as in using strong solutions of nitrate of silver. I would here remark that it is a common practice to use stronger solutions of nitrate of silver in purulent than in trachomatous ophthalmia. Why, then, should we not pursue the same practice in the use of corrosive sublimate in acute blenorrhœa? Certainly we cannot expect to get its full effects as a germicide in the weak solutions hitherto commonly employed, not because the weak solution is incapable of doing the work under favorable conditions, but because the conditions are necessarily altogether unfavorable.

Pernice, in 1884, experimented on the cornea of rabbits with pus taken from a lachrymal abscess, and found its inoculation in the cornea produced deep ulcers and suppuration of the cornea, but if the same pus had been mixed for a while with a weak (1–10,000) solution of corrosive sublimate, it thereby lost its infective qualities. He therefore advocated such a weak solution of corrosive sublimate in the treatment of conjunctivitis and corneal ulcers; practically, however, I think it will be found so weak a solution is of very little value as an antiseptic in ophthalmic practice.

I have recently had an opportunity to test the efficacy of perchloride of mercury in three cases of acute blenorrhœa, two of which were clearly of gonorrhœal origin, and the third probably of the same nature. The results were, it will be seen, not altogether unsatisfactory.

Case I.—A. D., aged 19, French-Canadian, admitted into hospital June 19th, suffering from typical gonorrhœal ophthalmia in left eye of about one week's duration; self-inoculated; lids much swollen; copious purulent discharge, and chemosis of conjunctiva; cornea intact. Ordered ice compresses and the conjunctival sac to be washed out every hour with solution of boracic acid, and every fourth hour with a solution of perchloride of mercury 1–2000. This treatment continued for four days with little or no visible benefit. A small transparent ulcer of cornea now visible. Ordered one application of solution of hydrarg. perchloride, 1-1000, afterwards the above treatment continued. The following day there was a marked improvement in the condition of the eye. Four or five days later, commenced the use of nitrate of silver 20 grains to the ounce, once daily, in addition to the other remedies, and the patient was discharged cured on July 10th. Total duration of the disease, 24 days.

Case II.—A little girl, aged 3 years, admitted into hospital July 28th with intense purulent ophthalmia of both eyes, of about two weeks' duration in right eye, and one week in left. This little patient had an acute vaginitis, and was therefore, in regard to the eye affection, probably self-inoculated. A similar course of treatment was pursued. There was some ulceration of right cornea on admission, but this never reached any serious dimension, and both eyes are now well of the disease without impairment of vision in either.

Case III.—E. L., aged 16, a small lad for his age, admitted into hospital for rheumatism, which was found to be of gonorrhœal origin. Left eye affected with intense purulent ophthalmia, of doubtful duration. Cornea, when the treatment began, said to be slightly involved at outer and upper part. The same treatment was prescribed and continued until I saw the patient myself about a week later. There was then an extensive slough occupying the outer three-fourths of the cornea; only a small portion at inner side not involved. I immediately changed the treatment by cold compresses to frequent applications of very hot fomentations. The sublimate lotion and the boracic acid wash continued as before, only warm instead of cold, and a two-grain solution of eserine instilled every two hours. From this time the destruction of the cornea came to a stand-still, and in a few days the slough was thrown off, revealing a very extensive ulceration of the cornea, with a perforation and small prolapse of iris at the upper and outer part; a shallow anterior chamber with a small pupil dimly visible through the semi-transparent ulcerated surface. The ulcer is rapidly

filling up, and a subsequent artificial pupil at the inner side of cornea will probably secure useful vision.*

In the first two cases the result was all that could be desired and certainly afford encouragement for a further trial of the same plan. The prompt effect of the solution of perchloride 1–1000 when 1–2000 did not seem to be working well, is a significant fact, and leads me to hope that the stronger solutions used cautiously may shorten the course of the disease. If there were any way to protect the cornea from the action of strong solutions and at the same time make a thorough application *to all the diseased surface*, I have little doubt the salutary effects of perchloride solution would be much more apparent.

It is obvious that repeated and thorough cleansing of the eye must always take first rank in any plan of treatment, and this is where failure most often comes in, the medical attendant satisfying himself with general directions, without taking the trouble to see that they are strictly carried out.

What percentage of persons suffering from gonorrhœal ophthalmia have the undivided attentions of two or even of one nurse? and yet the best authorities lay down this thorough attention as the chief essential to successful treatment. Though a firm believer in the utility of cold applications, I cannot leave the subject without calling attention to the urgent necessity of watching the condition of the cornea during their use. If at any time any considerable cloudiness of the cornea, or a considerable area of dense opacity with or without loss of substance, or even if considerable ulceration occurs without opacity, as is often seen in the form of a crescentic furrow close to the corneal margin, then the cold applications must immediately cease and be replaced by frequent fomentations with very warm water. In this way a cornea otherwise doomed to destruction can often be saved, in part at least, and, perchance, though but a wreck of its former self. Some vision may be retained and the patient spared the misfortune of a shrunken and sightless eyeball.

Dr. Squibb states that he can now sell cocaine at one and a-half cents a grain.

* The prognosis given here has been justified by the result. The eye is somewhat blanched, but still quite useful as a visual organ.

"LISTERINE" IN SPECIAL PRACTICE.

BY G. STERLING RYERSON, M.D., C.M., L.R.C.P. & S.E.

Lecturer on the Eye, Ear, Throat and Nose, in Trinity Medical College, Toronto.

The principle of antisepsis in suppurative disease of the middle ear is by no means a new one, but it will be found, on examination, that some objection can be raised to every antiseptic agent, either on the score of poisonous qualities, mechanical defects, idiosyncrasy of the patient, or of inefficiency; therefore any new substance possessing undoubted germicide powers, is welcome. For it is a matter of trite, every day experience that what is one man's food is another's poison, in other words, a remedy which may fail in one case, for perhaps unknown reasons, may be successfully used in others.

"Listerine" is the name given to a pharmacal compound, the antiseptic constituents of which are Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Aurensis in combination. Each fluid drachm also contains two grains of purified benzoboracic acid. It is, according to Dr. Deems, President of the Augusta, Ga., Academy of Medicine, "a powerful and trustworthy antiseptic "agent. It prevents the various fermentations. "Meat keeps indefinitely in it. It is a swift and "sure destroyer of infusorial life. It destroys the "activity, growth and motion of low forms of "vegetable life. Owing to this property, com-"bined with its non-toxic effect on the human "system, in quantities medicinal and not exces-"sive, it has the immense advantage over carbolic "acid that it may be administered *internally* as "well as used with freedom either by injection, "lotion, or spray." Dr. Deems appends a detailed report of his experiments on various substances and fluids.

In view of these statements, I determined to try it in chronic suppurative disease of the middle ear, and the results justify me in saying that I regard it as an agent of great value in the treatment of these cases. I have also used it as a spray in cases of muco-purulent nasal discharges and think it is of value here also. The strength used was ℥j to ℥j of water. I have used it with equal parts of water in ozœna and have found that it relieves the odor promptly, after proper cleansing of the

parts. I do not see why it should not prove useful in general surgery.

I also report two cases of eye disease in which I have used it. Of course the number of cases is too small to draw any general inference, but I would suggest that the remedy be given a fair trial. From the results obtained in cases V and VI, it looks as though it would prove of use in eye practice, and supersede the very dangerous practice revived lately of using very strong solutions of carbolic acid in purulent affections of the eye.

CASE I.—A. K., æt. 40, has had discharge from the ear at intervals since early childhood. It is occasionally very offensive. No pain. On examining the right ear, I found a large kidney-shaped perforation in the anterior and inferior quadrants of the drum membrane. No granulations. A thin, ichorous discharge was oozing from the middle ear. I used pure Listerine instillations every other day for a fortnight, at the end of which time the discharge had quite ceased and to-day the opening in the drum head is reduced to the size of a large pin's head. The distress in his head of which he had formerly complained is quite gone. I have hope that the drum head will heal up under this plan of treatment. He has had *no application* except Listerine, using a weak solution at home for himself.

CASE II.—On Feb. 19th, ult., Mr. J. K. consulted me with reference to a discharge from his left ear of some years' duration. The drum membrane on examination was found perforated, and the mucous lining of the middle ear granular. I used Listerine pure every day for a time, and then every other day, with a gradually diminishing discharge with occasional exacerbations. Finally, about the 6th of the present month, the discharge seemed quite arrested and has remained so since. The opening in the drum head is somewhat diminished in size.

CASE III.—Mr. P. contracted a severe cold last fall, while out prospecting in the Rocky Mountains. It culminated in an acute suppurative inflammation of the middle ear. When I saw him a few weeks ago all pain had ceased, the hearing on the affected side was not good, and there was a constant purulent discharge through a perforation in the drum head. He was put under treatment with boracic acid and nitrate of silver solution locally, with varying success. Upon obtaining Listerine I began to apply it with almost immediate improvement. In the end I succeeded in healing the ulcerated drum membrane and arresting the discharge. He could hear Politzer's acoumeter at 18 feet with the affected ear.

CASE IV.—Master B., æt. 7, caught cold, and in consequence had an acute suppurative process set up in both middle ears. I began to use Listerine when he was brought to me a week later, and in two weeks the discharge had ceased and hearing was restored.

CASE V.—Miss R. went to sleep in a draft one afternoon, and on waking, the left eye, which was uppermost, felt queer. It did not take many hours for an attack of acute granular ophthalmia to declare itself. The lids were greatly swollen, the discharge from the eye considerable, as was also the photophobia, and the granulations were marked. I pursued the usual course of treatment for nearly a week with but little benefit. Then I thought I would try Listerine; I applied it pure with a brush to the inflamed conjunctiva, causing considerable stinging at first, followed by a very pleasant after-feeling. An improvement manifested itself very soon, and in three weeks the eye was nearly well. To some remaining granulations I have applied cupri-sulph. in stick, but during the acute course of the disease Listerine alone was used, after leaving off the first treatment.

CASE VI.—Mr. A. has had granular ophthalmia for many years with parted pannus corneæ. I applied Jequirity infusion until a well-marked membrane was developed; then experimentally I applied Listerine. In four applications the false membrane was gone. Might not Listerine be used with benefit in diphtheritic ophthalmia? or in even diphtheria itself?

TREATMENT OF A CASE OF FOREIGN BODY IN THE RIGHT BRONCHUS; RECOVERY.

BY N. E. M'KAY, M.D., C.M., M.R.C.S., ENG.
(Surgeon to "Victoria General Hospital.")

George Bates, æt. eight years of age, was admitted into the "Victoria General Hospital" on the 22nd of April at 6.30 p.m., suffering from a tamarind stone in the right bronchus, which he had swallowed the evening before. When admitted his

face was flushed, he had an occasional fit of coughing which was aggravated on deep inspiration. Each paroxysm was accompanied by expectoration of mucus; in the interval the breathing was quite tranquil. His voice was hoarse, tongue coated, temperature normal, pulse 110.

History obtained from child's mother—The child was playing with tamarind stones, when suddenly he was attacked with a violent spasmodic cough—difficulty of breathing—a sense of suffocation, with lividity of countenance and more or less insensibility. The mother being present at the time instantly introduced her finger into the child's throat and removed one stone, but this gave him no relief. His brother then held him in the inverted position and shook him, whilst the mother slapped him on the back, but no stone came away. In a minute or two these serious symptoms suddenly improved and the child was able to breathe quite freely. An emetic was given but without success. Two doctors were now called in, who diagnosed a "foreign body in the trachea," and they made several unsuccessful attempts by succussion and inversion to remove it.

Physical examination—Percussion elicited clear resonance over both lungs. The movement of the right chest was less free than that of the left, and the vesicular murmur over the right lung was greatly diminished whilst the respiration over the left was puerile in character. The child complained of pain behind the upper border of the sternum, and a cooing sound was heard here during the respiratory acts, most audible at the junction of the second rib with the sternum on the right side. This, together with the limited motion in the right chest, and the diminished respiratory murmur over the right lung enabled me to locate the foreign body in the right bronchus. Dr. Oliver met me in consultation at 9 o'clock the same evening, and agreed with me in my diagnosis. A consultation of the medical staff of the institution was held early the following morning at which an operation was determined upon. At 2 p.m., the child being put under the influence of chloroform, I performed tracheotomy, and to enable me to examine the larynx as well as the bronchi, I performed the superior operation. On opening into the trachea I passed a loop of fine silver wire down towards its bifurcation, but every attempt to introduce it produced a violent fit of coughing. I then introduced a gum elastic catheter, well carbolized, and pushed it into the left bronchus to the extent of fully 4½ inches, but met with no resistance. I then introduced it into the right bronchus and met with an obstruction 3½ inches down. I again introduced the silver-wire-loop into the right bronchus and pressed it firmly against the obstruction, and held it there until a very violent expulsory effort was produced which, on withdrawing the wire, expelled the stone through the tracheal opening. One stitch was put in the tracheal opening and the edges of the wound were brought together and held in position by catgut sutures and strapping The wound was then covered with iodoform gauze, and the child's chest enveloped in cotton wool. He was put to bed in a room heated with steam. At 5 p.m. there was some emphysema about the wound extending from angle of jaw to about two inches below upper border of sternum. At 7 p.m. emphysema had disappeared considerably. For the next four or five days child had a slight hacking cough, accompanied by expectoration of mucus. A simple expectorant mixture was ordered him.

April 24th morning, pulse 130, temperature 99°; Evening, pulse 120, temp. 99½°.

April 25th morning, pulse 72, temp. 98½°; evening, pulse 130, temp. 99½°.

April 26th morning, pulse 100, temp. 99½°; evening pulse 120, temp. 100°.

April 27th morning, pulse 80, temp. 99°; evening pulse 130, temp. 100°.

April 28th, stitches removed, wound healed.

After this date pulse and temperature remained normal, and child was discharged cured May 2nd, the 9th day after the operation.

Correspondence.

CRANIOTOMY *V.* DEATH OF MOTHER AND CHILD.

To the Editor of the CANADA LANCET.

SIR,—The case given in the May number by 'Junior Practitioner' is a very horrible one; it does seem astonishing that a woman's life should be sacrificed to such superstition. In this affair the plain duty was to fully explain to the unfortunate woman the real state of affairs, and to shew her she was throwing away her own life for no pur

pose whatever. The same explanation should also be given to the husband; let him fully understand if he refused his consent he would be held accountable for his wife's death. There is no necessity for asking the opinion of any others. If these explanations did not convince them of their folly, then propose the Cæsarian section, telling the woman the great danger to herself, and that there is no certainty of saving the child, though the chances may be in its favour. Our first and chief duty is to the mother. The life of the child should not have a feather's weight compared with her safety. Granted this, will any one say the Cæsarian section is the proper operation? In craniotomy we destroy the child but, as a rule, we save the mother. Even before chloroform we rarely lost a case, and now, with antiseptic precautions, our chances are much better. In Cæsarian section do we not lose as many as we save? It must be remembered the majority of these cases occur in poor houses, deficient in ventilation, drainage and general comfort —no trained nurses—frequently a long way from the doctor's house. I suppose the great objection to craniotomy on the mother's side is that the child not getting the rights of the church will, as the lovely Athanasian creed says, perish everlastingly (whatever that may mean). Now, as it seems that baptism is a safe passport to everlasting happiness, why not do (as I have done) have the child baptised in utero. I think the church would recognize it, and the poor little soul would pass into heaven without undergoing the troubles the writer has had.

Yours truly,

F. C. MEWBURN, M.D.

Toronto, May, 1887.

Selected Articles.

BALDNESS: WHAT CAN WE DO FOR IT?

BY GEORGE THOMAS JACKSON, M.D.

There is probably no one subject in medicine of which the average practitioner is less informed than that of the hair. And yet the subject is important, and everyone should have a clear idea of the resources and limitations of our art in the care of the hair and the treatment of baldness. It is the aim of this paper to point out the varieties of baldness, to throw as much light as possible upon its causation, and to show what and how much may be done in the treatment of it.

The four main varieties of alopecia are: 1, Alopecia adnata; 2, alopecia senilis; 3, alopecia prematura or presenilis; and 4, alopecia areata. The last variety will not be considered at this time, as I have recently contributed a paper upon the subject to the *New York Medical Journal*—in February, 1886.

Alopecia adnata is that form of baldness which is congenital, as its name would indicate. It is comparatively infrequent. An infant is born either with a good crop of long, colored hair which early falls out, to be replaced with light-colored permanent hair, which soon grows darker; or it is born with colorless hair in greater or less abundance, which gradually becomes darker; or it is born with a perfectly bald head. In the majority of cases this last condition is transient, and in a few days or weeks the scalp will be covered with hair. All these states of hair-growth are dependent upon the time when the change of type between the fœtal and permanent hair takes place. As a rule the change is complete at birth, when we find the colorless hair; if it is delayed until after birth, we have the long, dark hair; if at the time of birth the fœtal hair has been shed, but there has not been time for the permanent hair to grow, we have the bald head.

Now all these are normal conditions, and even the last, or bald head, is only to be considered as transient alopecia adnata. But in some cases the hair-growth is delayed for months, and in some of these there is a condition of lichen pilaris present, the scalp being rough and covered with pointed papules. The hair will usually grow in time, though a few cases have been reported in which the hair never grew. Delayed dentition, or even a deficiency of teeth, has been observed in these cases.

The *cause* of this form of baldness is an arrest of the development of the hair. Upon what condition such an arrest depends we do not know. Microscopical examinations of sections of the scalp in cases of inveterate alopecia adnata show either an absolute absence of hair-follicles or an aborted development of them. In some families the disease is hereditary.

As to *treatment*, the most we can do is to attend to the general nutrition of the child and the hygiene of the scalp. Happily in most cases the disease remedies itself. The scalp should be kept free of sebaceous accumulations, and thoroughly washed with soap and water. Should the parents and friends become restive under this expectant plan of treatment, some stimulating hair-wash may be prescribed, such as will be given when we come to the discussion of alopecia presenilis. If lichen pilaris is present, the free use of soap frictions, with the tincture of green soap every day, followed by inunctions with oil, will remove the accumulation of epidermis which clogs the

hair-follicles, and thus give the hemmed-in hair a chance to grow.

Alopecia senilis is that form of baldness which occurs in old age, or after the age of forty-five, and is often preceded or accompanied by grayness of the hair. When this form of baldness begins, it is progressive. Commencing upon the vertex it forms the tonsure, and from there spreads forward so as to involve the whole top of the head; or it may begin anteriorly and spread backward; or the whole top of the head may show a thinning of the hair. When complete the scalp is smooth, oily, shiny, and looks stretched. It is unaccompanied by any disease of the scalp, excepting, perhaps, a slight seborrhœa. The region it affects is that part of the scalp over the aponeurosis of the occipito-frontalis muscle, while the occipital and lateral parts of the scalp are spared. It is always symmetrical.

The *cause* of this form of baldness is a gradual sclerosis of the subcutaneous tissues of the scalp, the retrograde process beginning in the arterial supply to the scalp, a fibrous endarteritis narrowing the lumen of the cutaneous arteries, till finally the capillary circulation about the hair-follicles is obliterated. This causes a lessening of the subcutaneous fat and a narrowing of the meshes of the connective tissue. It is but one expression of that general lowering of nutrition incident to advancing years.

When the scalp is atrophied we can do nothing in the way of *treatment*; there is no cure for alopecia senilis. Prophylaxis may do a good deal in postponing the loss of hair. Of what prophylaxis consists will be shown in the next section.

Alopecia prematura is that form of baldness which occurs before the forty-fifth year of age. It is true that the dividing line is purely arbitrary, but it is convenient, and the age of forty-five is usually considered to be that of man's prime, the top of the hill of life. There are two varieties of premature alopecia, viz., the idiopathic and the symptomatic, each of which deserves separate consideration.

Idiopathic premature baldness begins at any time before forty or forty five years of age, most commonly between the ages of twenty-five and thirty-five. Its peculiarity is that it arises uninfluenced by any antecedent or concomitant local or general disease. When it once begins, it is generally progressive. Its course is the same as that of the senile form, beginning on the vertex and proceeding forward; or beginning on the forehead and running backward; or affecting the whole top of the head. It is a process of gradual loss of vigor, and a gradual lessening of the diameter of the hair. The hairs which first fall out are replaced by those of less vigorous growth; these in their turn are shed to make way for yet weaker ones, and so the process is repeated until complete baldness results, no new hairs being produced to take the place of those which are shed. The scalp in the affected region is atrophied, and often bound down to the underlying tissues so tightly that it cannot be slid about as easily as in the normal condition. It differs from senile alopecia in the earlier age at which it occurs, and in usually being unaccompanied by other signs of diminished physicial vigor, such as canities, loss of teeth, and dulness of sight and hearing.

The chief *cause* of this variety of baldness is heredity, and everyone has known of families in which the fathers and sons for many generations have become bald at an early age. This is due, according to Pincus (*Berl. klin. Wochenschrift*, 1883, xx., 645), to the fact that in certain families there is a tendency to an early induration of the connective tisssue under the aponeurosis of the occipito-frontalis muscle, the meshes of which, becoming progressively lessened in size, gradually draw the scalp down upon the underlying tissues, and the hair-papillæ, becoming more and more pressed upon, are at first lessened in diameter and at last completely obliterated.

Improper or deficient care of the scalp and hair is another cause of early baldness, or, at least, hastens its advent in those predisposed thereto. It is a very common practice for men to souse the head daily in water, and as Ellinger (*Virchow's Archiv*, 1879, lxxvii., 549) has noted this habit in eighty-five per cent. of his cases of baldness, it is probable that it is an important etiological factor. Thinkers and brain-workers are very often bald. Eaton (*The Popular Science Monthly*, October, 1886) has recently upheld the thesis that the coming man will be bald and toothless. He found by actual count that baldness was far more prevalent among the intellectual and educated classes than among the uneducated. Thus in the audiences attendant upon churches and operas in Boston, from forty to fifty per cent. of the men were bald; while the percentage was only twelve to twenty-five among the crowds visiting cheap museums and prize-fights. In active intellectual effort the circulation of the head is increased, and the scalp sympathizes and becomes warmer than usual. This increased warmth of the scalp in thinking may operate in the same way in the production of baldness as does the wearing of tight, unventilated hats, which sweat the hair more or less. Stiff hats may cause baldness by compressing the arteries that supply the scalp. Thus F. A. King says (*American Journal of the Medical Sciences*, 1868, April, p. 416): "Baldness of the vertex is due to compression, by stiff hats, of the anterior temporal arteries in their course over the frontal protuberances, and of the occipital behind. The reason why baldness occurs in different places in different individuals is probably due to differences in the shape of the head. The little tuft of hair

often observed on top of the forehead is nourished by the two supraorbital arteries which escape pressure by passing over the forehead in the slight concavities between the frontal eminences." The existence of this little island or tuft of hair depends more likely upon its being located over the belly of the occipito-frontalis muscle, and not over its tendon.

That women do not become bald so often as men is probably because they preserve the cushion of fat under the scalp longer than men do. Pincus says that their comparative exemption is due to the fact that in them "the spaces between the connective-tissue fibres in the deeper and middle layers of the scalp are much larger than in men, the skin of the women during their life preserving more of the characteristics of the skin of children." Other reasons for their comparative freedom from baldness are given, such as: Because they do not wear their hats as much as men, neither are their hats so close-fitting nor made of so impermeable materials; because they give more attention to the care of the hair than men; because they seldom wet their heads; because they are not so abundantly covered with hair as are men, and therefore have less drain upon the hair-forming elements; because their hair is less often cut. Of all these reasons those of most weight are the preservation of the subcutaneous fat and connective tissue, and the greater attention paid to the scalp.

The *treatment* of idiopathic premature baldness is mainly one of prophylaxis and of hygiene. Though hosts of remedies have been proposed from time to time and more or less vaunted, I am inclined to believe that due attention to the proper care of the scalp and to the general hygiene of the body is more reliable than any so-called remedies. Unfortunately, men who most often are bald are least inclined to give the requisite time and trouble to the care of the scalp, and therefore our results are not as good as they should be. Women, though less frequently bald, are willing to give attention to their scalps, and with them our results are better.

Prophylaxis consists in giving early and proper care to the scalp and hair, and this especially in families in which baldness is markedly hereditary. Prophylaxis should be begun at the birth of the child in such families and continued throughout life. The proper care of the scalp consists in keeping it clean by an occasional shampoo of soap and water, borax and water, or some such simple means, and in brushing and combing the hair, and in the avoidance of all things that can harm the scalp. The shampoo need not be repeated oftener than once in two or three weeks, and whenever the scalp has been washed it should be carefully dried, and some simple unctuous substance applied, such as vaseline or sweet-almond oil. Women should dry their hair by sitting before an open fire or in the sun, and should not dress it until entirely dry. The first shampoo the baby gets is to rid the scalp of the vernix caseosa. This should be most carfully done, without the employment of force, the sebaceous plate having been thoroughly soaked with sweet-oil before the attempt to wash it off is made. After it has been removed the infant's scalp is to be oiled daily until the hair is growing nicely; this is done to guard the tender scalp from injury from atmospheric and other causes. So soon as the hair is grown the scalp only needs an occasional wash to keep it clean, unless there is some sebaceous concretions, when that condition is to be treated.

The hair should be thoroughly brushed and combed daily, not in the careless way in which it is done by most people, but systematically for some five or ten minutes, and with vigor sufficient to make the scalp glow. For this we need a good brush with long, moderately stiff bristles, set in groups widely separated from each other. Such a brush will reach the scalp and brush out all dust. A comb with large, smooth teeth, set wide apart, should be used with the brush to open up the hair to the air; first a stroke of the comb and then of the brush. After the systematic brushing the stiff brush should be laid aside and a softer one used to assist the comb in parting the hair and to polish it. This operation of brushing is rather difficult for women, and most women merely employ the comb. But the stimulation caused by the brushing is very valuable and should be insisted on.

What *not* to do is of nearly equal importance with what to do, in the care of the scalp. We should not allow the use of pomades on the healthy scalp, as they are quite unnecessary if the hair is properly brushed, and by becoming rancid are apt to irritate. The daily sousing of the hair with water should be positively interdicted. Women should not use bandoline or the like sticky substances; should not pull and twist the hair in all sorts of unnatural positions; should not scorch it with curling-irons and hot pipe stems, nor smother it under false hair. The hair needs light and air for its growth, and will not endure forever the pulling and twisting which fashion demands of its votaries. Men should not constantly wear close-fitting hats or caps. If their avocation requires their heads to be covered, they should wear ventilated, easy-fitting hats. Working under hot artificial light should be avoided, so that the head will not be sweated. Withal, the general condition of the physique should be maintained at as high a standard as possible by exercise and moderation in all things; and worry and anxiety of mind should be combated by the cultivation of a more cheerful habit of thought.

When the hair is falling the care of the scalp, as

just indicated, should be continued or, if not already practiced, begun. In addition, local stimulation must be employed. Some remarkable results in making hair grow by hypodermatic injections of pilocarpine have been reported in the medical journals. This may be tried. I have found the drug more useful in alopecia areata than in ordinary alopecia. We know that jaborandi increases the circulation of the skin, and it would seem rational to suppose that in some cases of baldness, dependent upon malnutrition of the papillæ, it might do good. Pincus, who has devoted many years to the careful study of baldness, advises the application to the scalp for from two to five minutes, on two to four successive days, of a wash of

Bicarbonate of soda . . .	4 parts.
Distilled water	180 "

M.

rubbing in one or two tablespoonfuls of it with a soft hair-brush or sponge. Then a pause is made for as many days as the wash was used. On the first and second day of the interval between the application some oil is to be rubbed into the scalp. This treatment is to be continued for a year, and if the disease is then progressive, stronger remedies are to be used. As we will have occasion to speak of a number of stimulating hair-washes when we discuss the treatment of symptomatic baldness, it will not be necessary to mention them in this place.

As a rule, the treatment of idiopathic alopecia presenilis is unsatisfactory, and we should not encourage our patients to expect to see the condition of their hair improved to any great extent under one year, at least, of treatment. But if due attention is given to the care of the scalp and hair, the fall of the hair can be checked in many cases, and that is well worth the trouble it costs.

Symptomatic premature alopecia.—By this term is meant baldness occurring before the age of forty-five, and arising from some accompanying local or general disease. It has four varieties, viz.: 1, Alopecia furfuracea or pityroides; 2, alopecia syphilitica; 3, defluvium capillorum; and 4, alopecia follicularis.

Alopecia furfuracea is that variety which is due to dandruff—a seborrhœa or pityriasis capitis. The dandruff may be in large amount, so as to form cakes of fatty matter on the scalp, or it may be slight, in the form of thin, easily detachable scales, which fly off from the scalp and fall upon the coat-collar like snow. This variety of baldness is met with at all ages, but is most serious between the twentieth and thirtieth years of age, and is by far the most common of the different kinds of alopecia. It has two stages; during the first there is a good deal of dandruff, and the hair is dry and falls out slightly. This stage lasts from two to seven years. Then the second stage begins, when to the dandruff is added a rapid fall of the hair. The location of the baldness is the same as in the preceeding forms, though it effects most often the whole top of the head. The course of the disease is progressive and more or less rapid, the hair becoming gradually thinner both as to quantity and diameter, till at last complete baldness results. With the increase of the baldness there is a continuance of the dandruff, until the hair has nearly all fallen out, when the dandruff lessens or disappears.

Alopecia syphilitica next claims our attention. It occurs in the early stage of syphilis most often, but may occur quite late in the disease. Syphilitic exanthems may be present on the scalp and body, or the baldness may be the only symptom of the disease. When it is the result of the syphilitic cachexia we will frequently find more or less dandruff, and there will be a general thinning of the hair, giving the head a peculiar look, which may be likened to the effect produced by taking a pair of dull shears and cutting the hair away in a very irregular manner, so that the head will look ragged. The head is not completely bald in any extended area, but here and there over the whole scalp are irregular, partially denuded patches. Other regions besides the scalp may be affected, the broken arch of the eyebrows being characteristic. Besides this, which may be considered the characteristic species of syphilitic baldness, we have disseminated bald spots of cicatrical tissue due to the presence of syphilitic deposits about the hair-follicles, which have undergone absorption and caused destruction of hair-follicle and scalp tissue. This latter variety belongs rather to the category of alopecia follicularis.

Defluvium capillorum is the variety of baldness which follows acute diseases, especially fevers, or occurs in the course of some cachexia, such as mecurialism. The most common form is that which follows fevers. Usually the hair does not fall out till after convalescence has begun, and then it will be very rapid, the hair coming out by handfuls at times, and the whole scalp is affected. As a rule it does not cause absolute baldness, though in some rare cases all the hair may fall from the body, as in a case of alopecia areata maligna.

Alopecia follicularis is that variety of baldness which is due to local lesions, such as the syphilides, and the parasitic disorders. The appearances presented will vary with the cause. When due to pustular diseases, such as impetigo, the patches are not larger than from the size of a silver dollar to that of the palm. When due to some diffuse inflammatory disease such as erysipelas, the bald patches are quite large and irregular in shape, and the scalp is hyperæmic. When due to favus or ringworm the hairs are altered, becoming lustreless, dry, and split; in ringworm they are often

broken off near the scalp. The bald spots of favus are covered with thick, mortar-like crusts, or are smooth, cicatrical, and of a peculiar red color. In ringworm they are covered with scales, and sometimes crusts, which are not so thick as those of favus.

The *causes* of alopecia prematura symptomatica are manifold. We have already mentioned seborrhœa sicca, syphilis, fevers, impetigo, erysipelas, and parasitic diseases. Besides these may be mentioned violent shocks to the nervous system, mental distress, parturition, lupus vulgaris and erythematosus, lichen ruber and scrophulosorum, lepra, and other cachexiæ. The baldness following fevers, and with syphilitic and other cacheixæ, is due, in most cases, to seborrhœa, but may be purely a nutritive trouble, the hair-bulbs being poorly nourished, the hair becoming loose and falling out. The baldness accompanying or following the pustular and ulcerative diseases is due to the destruction of the hair-follicles. The baldness following upon the abuse of mercury, excess in venery, and intemperance, is due to their damaging effect upon the constitution of the patient. Anything which impairs the full vigor of a man may secondarily contribute to the production of baldness, especially if he have a predisposition thereto. This predisposition is an important factor in all cases of alopecia furfuracea. We often meet with people who have had dandruff for years without alopecia ; but in many subjects dandruff does cause baldness.

As far back as 1874 Malassez and Chincholle described a parasite as the cause of pityriasis capitis and of the baldness following it. But Bizzozero has recently shown that spores, identical with those of Malassez and Chincholle, are found quite generally upon the normal human scalp. Lassar and Bishop believe that alopecia furfuracea is contagious, and is frequently transmitted by barbers' brushes and combs. They explain the comparative immunity of women by the fact that they are less exposed to infection at the hands of the barber. Their experiments with the scales taken from the scalp of a man who was losing his hair rapidly, and which they made into a pomade with vaseline and rubbed upon the back of a guinea-pig and a rabbit, in each case producing baldness, are interesting, and seem to prove their thesis. They require and deserve repetition.

Much that has been given in the etiology of the idiopathic form of premature baldness, especially in regard to the use of water on the head, the wearing of hats, and the use of pomades, could be repeated here, since they tend to produce pityriasis, and in that way alopecia furfuracea.

The *prognosis* of symptomatic premature baldness will vary with its cause. When due to dandruff, it will be good if treatment is begun in time, before actual baldness is present. Even if the hair is quite thin and the scalp shows a large number of lanugo hairs, we may yet have hope, if there is no predisposition to baldness. Defluvium capillorum usually takes care of itself, and we can give our patients a favorable prognosis. Syphilitic alopecia, when dependent upon the cachexia of syphilis, is seldom permanent. The baldness following favus is permanent; that coming after ringworm is transient. Ulcerative processes are followed by permanent baldness. Pustular lesions will not cause baldness, as a rule, and if the hair is plucked early from the follicle the danger of its occurrence is lessened.

Rapid results cannot be expected from our treatment. We must have our patients understand that they must have patience and perseverance, and that the result of treatment will depend chiefly upon their faithful carrying out of directions.

The *treatmant* of symtomatic premature alopecia is both prophylactic and curative. Of course, prophylaxis applies chiefly to alopecia furfuracea. If it were better understood that dandruff is often followed by baldness, it would be early submitted to treatment, and there would be fewer bald heads. The prophylaxis for this form of baldness is the same as for the idiopathic form, and need not be repeated here.

The curative treatment of alopecia furfuracea is first addressed to the ridding of the scalp of the seborrhœa or pityriasis. If there are thick crusts or cakes of sebaceous matter on the scalp they must first be soaked with oil and then removed by the shampoo. If dandruff is present in only slight amount the shampoo may be used at once. For this purpose we should use soap and water. For our soap we may choose the tincture of green soap. If the scalp is too tender for that we may use Sarg's liquid glycerine soap, Pears' glycerine soap, Castile soap, or any good toilet-soap. Or, if the scalp does not tolerate these, we may order a shampoo of eggs, made by beating up the yolks of three eggs in a pint of lime-water and adding half an ounce of spirits of Cologne, if we want perfume. Borax and water make another excellent wash. Do not stint the water. Rub the shampoo vigorously into the scalp in all directions, using either the fingers or a long-bristled, moderately stiff brush When the scalp has been well rubbed, the soap or chosen shampoo is to be washed out with a copious stream of water of a temperature agreeable to the patient, or, if convenient, with alternate douches of hot and cold water. The scalp and hair are then to be thoroughly dried, and a little oil rubbed into the scalp. If an excess of oil has been used it may be readily removed by pulling the hair between the folds of a towel moistened with Cologne, alcohol, or ether. The shampoo should be repeated daily for a week or so, and then once every week or two.

While the care of the scalp and hair is, perhaps,

the most essential element of success in the treatment of these cases, still they need stimulating treatment in addition. So many stimulants have been recommended that one is somewhat embarrassed by the excess of richness. We may use carbolic acid in alcohol, two per cent. strength; tincture of capscium or of cantharides, one to three drachms to the ounce of water; chloral hydrate, or tincture of nux vomica, one drachm to the ounce; corrosive sublimate, one to three grains to the ounce; the stronger water of ammonia, pure, or diluted if too strong. These may be used either as lotions or ointments, separately or in combination. Then there is a wash of rum and quinine which every druggist keeps upon his shelves, and so many of the laity use. This list is by no means exhaustive, but quite sufficient.

An excellent ointment for use, as curative of the seborrhœa, is one which is known, in at least three different dispensaries, as "Bronson's Ointment," after my esteemed friend Professor E B. Bronson, of New York Polyclinic. It is made of

Hydrarg. ammon	℈ ij.
Hydrarg. chlor. mitis	℈ iv.
Vaseline	ad ℥ j.

M.

and when properly compounded forms an elegant pomade of the consistence of a Mayonnaise dressing, and effectual withal.

Pincus advises, in the first stage of alopecia furfuracea, the rubbing of the scalp with a solution of bicarbonate of soda, strong enough to redden the skin, and following this with a compress and an oiled-silk cap to be worn all night. Unfortunately this stains the hair. In the second stage of baldness, when the hair-fall is pronounced, he advises the use either of

Tannin	gr. lxxx.
Ungt. rosæ	℥ j.

M.

rubbed every night, or of

Ol. sabinæ	gtt. v.–xxx.
Alcohol	℥ j.

M.

used in the same way. The latter he prefers, as it can be stopped for several weeks at a time, while the use of the former cannot be interrupted for more than six days. A hood is to be worn at night with either of these. The oil of savin often causes headache, nausea, vertigo, and sleeplessness, which interdict its use. Pincus further advises the use of a lotion or ointment containing two to four per cent. of lactic acid, and eight to ten per cent. of boracic acid, applied daily for two or three weeks, and then, after a pause of a few days, followed by an ointment of bicarbonate of soda, three to eight per cent. strength, for one week. Thus he alternates his ointments for one year.

Lassar (*Monatshft. f. prakt. Dermat.*, 1882, i., 131) has had good results by washing the scalp with tar-soap daily, following with a wash of

Sol. hg. bichlor. (1 in 300).	
Spt. cologne,	
Glycerine	āā ℥ ij.

M

Then the scalp is to be dried, and a one to five per cent. solution of naphthol applied. Finally, a one and a half per cent. carbolized oil is poured over the head. I fear that we would have difficulty in persuading our patients to carry out so troublesome a procedure.

Heitzmann, of our own city, reports ("Transactions of the American Dermatological Society," 1885, p. 32) favorable results from the use of crude oleum rusci in an ointment of vaseline and paraffine, in ten to twenty per cent. strength. This is to be alternated with sulphur and white precipitate ointments.

Piffard (*Journal of Cutaneous and Venereal Diseases*, June, 1885, p. 180) has had good results by using the following:

Picis liquidæ,	
Olei lavandulæ	āā ℥ vj.
Olei pini sylvestris	℥ j.

M.

In some cases sulphur is added at the commencement of treatment.

Resorcin has been recommended by Ihle. I have not found it so efficacious as other remedies.

In the treatment of these cases I have seen the best results follow the systematic care of the hair, the avoidance of frequent wetting of the hair, and the use of an ointment of precipitated sulphur in the strength of one drachm to the ounce of vaseline, applied every night for a week or two, and then every other night, until the scalp no longer is furfuraceous, and then once a week for months. If care is used in applying the ointment there will be no excess of sulphur showing on the hair.

As illustrative cases of what may be done by this plan of treatment let me recite the following:

Case I.—J. D., aged 20. Hair has been falling steadily for past two years, excessively for last two months. Hair thin over whole top of head, dry, and deadlooking. A shampoo of borax was ordered, to be followed by the sulphur ointment, and directions as to the care of the scalp given. In three months the hair was growing luxuriantly, and the pityriasis was stopped.

Case II.—M.B., aged 26. Hair has been falling for three or four years, and over whole top of the head it is very thin. Was put upon the same treatment, and in nine months' time the hair had ceased falling, and was growing so nicely that the patient had discarded the wig which she had worn for many months.

Case III.—E. B., aged 22. Hair has been falling for two months; scalp scaly; hair thin and dry. After two months of the above treatment the scalp was looking healthy, and the hair was growing nicely.

Case IV.—Dr A., aged 33. Hair has been falling for four years; is quite bald. After two months' treatment the fall of the hair was almost entirely checked. He reported to me, after ten months' treatment, that the hair had ceased falling, and was growing in to an appreciable degree.

Case V.—L. B., aged 22. Hair is falling and has a good deal of dandruff. After five months' treatment the scalp was in fine condition, and the hair was growing nicely.

The treatment of *syphilitic alopecia* is by the internal administration of mercury, the mixed treatment, or the iodide of potassium, according to the stage of the disease. Locally, if any lesions are on the scalp, we may prescribe a lotion of the bichloride of mercury, or an ointment of the ammoniate of mercury. If there are no lesions, then stimulating remedies may be used as in alopecia furfuracea.

Defluvium capillorum remedies itself in most cases, and only requires attention to the general condition and to the hygiene of the scalp. If this does not suffice, stimulating measures, such as those given above may be used.

Alopecia follicularis needs the treatment appropriate to the disease present. If there are pustules on the scalp, the hair should be pulled from them.

In conclusion, I would place special emphasis upon the importance of the hygiene of the scalp; the nearer we can bring the scalp to a perfectly healthy condition, the more we can accomplish for the restoration of hair growth. Do not be too easily discouraged, nor allow your patients to despair until a year at least has been given to the faithful care of the scalp.—*Med. Rec.*

THE GENESIS OF "BRIGHT'S DISEASE."

The prevalence of the morbid change so far best known by the term "Bright's disease" (from Richard Bright, who first wrote on the subject); its certain ending, sooner or later, in death; together with the fact that its course can be profoundly modified by proper and judicious measures; all combine to give the subject an intense interest for all—physician and patient alike. "Old age is not an entity, but a set of conditions predisposing to what we call chronic Bright's disease. And though to most this comes in natural course when the prime of life is run, yet to some old age is no matter of years and of averages, but the running down of a spring set for an individual." Such is the happy expression of Dr. Goodhart in his well-known Bradshawe Lecture before the Royal College of Physicians of London in August, 1885. It is a slow, gradual growth of the lowly connective tissue of the kidney at the expense of the higher kidney tissues. But the kidney-mischief is only a part of the morbid change. A like growth of lowly tissue is going on in the walls of the arteries—atheroma—rendering them inelastic and brittle. But what calls out the growth of the lowly connective tissue in kidney and artery? The irritation set up by the presence of uric acid (possibly accompanied by other forms of albumen-metamorphosis) in excess in the blood. In order to grasp the matter firmly we must look a little beyond mere clinical facts, so as to read these last aright. We see, in the gradual evolution of life, the reptile, the cold-blooded inhabitant of tropical swamps, casting out its excrementitious matter in solid form—i. e., urates. The uric acid formation still continues in the warm-blooded bird, which also possesses a solid urine. When the mammalia appear, they are found to have a fluid urine, and their form of excretion is the soluble urea. But vestiges of the earlier formation still cling with the tenacity of original sin; and a certain, if small, quantity of uric acid is daily voided by man himself. So that we still carry with us traces of our descent in other forms than the branchial arches—the gills of fœtal life. Indeed, the circulation of the fœtus is that of the higher reptile; and the urid acid formation is distinctly seen in intra-uterine existence. We have long been familiar with the fact that under given circumstances the human body reverts to the early primitive form of urine-stuff. As to gout, we have recognized its association with good eating, especially when accompanied by a lack of exercise. The sensuous monk of old, lazy, fond of good living, and addicted to wine-bibbing, was the typical gouty man. Now, it is the country squire, whose habits were active till gout in his feet cripples him, and then its fell clutch becomes tighter and harder; or the plethoric publican, whose pleasures are those of the palate. This was the gout which came of good living. "Gout is the disease of those who will have it," said Meade. But a number of cases of distinct gout were found under widely different circumstances. They occurred in spare beings, small fastidious feeders, whose trencher performances were conspicuous by their temperance. To this class the term "poor man's gout" was applied. It did not explain the apparent paradox, and this inability to explain it was regarded as an opprobrium to the medical profession. Doubtless a large proportion of the sufferers from poor man's gout were descendants of gouty ancestors; and only by the strictest regimen, as to meat and drink, could they elude the visitations of their hereditary foe. But the gouty ancestry was not present in all cases.

The late Dr. Budd held that sundry persons came into the world with what he called "insufficient" livers; and Dr. Murchison endorsed this view. Such livers revert to the urid acic formation very readily; and now poor man's gout stands revealed before us. Indulgence in animal food in excess reduced a normal liver to the urid acid formation. A congenitally insufficient liver reverts to the uric acid formation under an ordinary or even meagre dietary. The result is the same in each case. When the uric acid formation is established, we find one of two consequences: either (1) the urid acid is gradually deposited in the body, in the articular cartilages by preference; or (2) is cast out by the kidneys, which, being constructed to excrete the soluble urea, are irritated by the presence of uric acid in excess; with the result of interstitial nephritis, or chronic Bright's disease. Often both are found.

Renal changes are by no means the sole morbid outcome of the uric acid formation. The cardio-vascular system feels its malign touch. A tight artery is the consequence of the blood condition, and, with that, changes in the arteries and the heart. The high blood pressure in the arterial system leads to hypertrophy of the left ventricle, and that, again, to secondary valvulitis of a progressive nature—probably due to the forcible closure of the valves; the mitral by the large ventricle; in the aortic by the recoil of the highly distended artery. Possibly in the latter there is a tendency to gouty deposits, as in the joints. The distention of the arteries leads to a growth of connective tissue in their walls, which lose their elasticity and become brittle—the atheromatous change,—and from these we get apoplexy and aneurysm; while angina pectoris vaso-motoria is called out by occasional spasm of the peripheral arterioles. Sooner or later the growth of connective tissue within the coronary arteries themselves cuts down the nutrition of a large heart, and fatty degeneration spreads throughout its structure. The failing heart leads, in its turn, to dropsy, albuminuria, and death. Indeed, we get a vast number of morbid outcomes in this widespread vaso-renal change, beyond the interstitial nephritis, which is spoken of as "chronic Bright's disease," or "renal cirrhosis," or "the gouty kidney," as it is variously termed. But the consideration here is restricted to what is truly "chronic Bright's disease," a renal change started by an impure blood, as Professor Hayles Walshe asserted in 1849. The uric acid (and possibly other excrementitious matter of nitrogenised character, the products of albumen metamorphosis) irritates the kidney structures, and starts up a rank growth of the lowly connective tissue, or packing material, at the expense of the higher true structures of the kidney. Here and there in minute foci, scattered throughout its mass, mainly in the cortex at the outset, we find the destructive action at work. The lowly invader is preying upon the higher structures, like the Tartar Turk spread himself over the population of the Balkan peninsula, and with the same result—destruction. Slowly and steadily one minute portion of the kidney after another is caught within the light touch of some soft growth of connective tissue; but as the latter drys up and hardens, it contracts, and the true tissue within its clutch is ruined—squeezed out of (functional) life and (anatomical) form. Bit by bit, and often very slowly, the process goes on, until the kidneys are rendered inadequate as depurative organs, and the blood is renderd toxic by being surcharged with waste of albuminoid origin. Then follow secondary inflammation set up by the toxic blood, or other truly uræmic complications, often desperate attempts on the part of the body to cleanse its blood. To call this widespread change a "kidney disease" is as much a misnomer as to apply "Pimlico" to the whole metropolitan area; and to seek for evidence of it in the renal secretion solely is as imperfect as would be an inquiry into the sanitary arrangement of Lambeth, however carefully conducted, as to the state of the whole area which discharges its sewage at Barking Creek. Casts of the renal tubules are truly the infallible evidence of renal destruction as to existence, if not as to extent. The character of the urine tells much; when it is copious and of low specific gravity we have only too good reason to decide that the injury is extensive and widespread. Sometimes albumen is present in the urine, but its significance depends upon its associations. Dr. Rcihard Bright found that when albuminuria coexisted with dropsy the kidneys were the seat of disease. But in the diagnosis of several practitioners the dropsy factor drops out of the calculation, and the diagnosis is made in its absence. Albuminuria and "chronic Bright's disease" are, however, not convertible terms by any means, nor the equivalent of each other, as is not unfrequently assumed.

Chronic interstitial nephritis is but one of the numerous morbid progeny of the uric acid formation, albeit an important unit. We are all familiar with this vaso-renal change, as it runs its course in the mesoblastic structures of the men of Norse type, large-boned and florid, giving joint-gout, cardio-vascular changes, chronic bronchitis, rheumatism, eczema, and secondary valvular disease in the large heart. That is one aspect of the vaso-renal change. But this is by no means the only aspect of this change. It may sometimes commence with primary kidney mischief and consequent imperfect blood depuration. Far more frequently it starts from a congenitally "insufficient" liver in persons of the neurosal diathesis or Arab type (to whom the term "neurotic" aptly applies), the phenomena are widely different. The

mesoblastic tissues are comparatively untouched; while the hypoblastic and epiblastic tissues are the seat of suffering. These persons are of spare habits and complain of indigestion, acidity, and flatulence —matters of the hypoblast; of migraine, accompanied by vesical irritability, of palpitation, of failure of the heart's action, resembling syncope, except that they do not lose consciousness, and and realise the horror of their condition—matters of the epiblast. In many cases cardio-vascular change is also present, and the migrainous neurotic is as liable to apoplexy as the red-faced, short-necked gouty man; the urine of the last is usually copious and clear, while in the neurotic the urine is often charged with lithates.

The migrainous neurotic of the uric acid formation is growing more and more common. Town populations have a tendency to grow smaller and darker, as anyone can see by comparing the living crowd with the worthies in effigy at Madame Tussaud's. They have a tendency to revert to an earlier and lowlier ethnic form, and are smaller in the bone. They are precocious, and the early development of the nervous system is accompanied by a deficiency or backwardness in the assimilative organs. There is an insufficient liver, which readily reverts to the uric acid formation; and this is aggravated by the fact that town dwellers eat more animal food than rustic populations of the wage class, while the latter have the advantage of plenty of oxygen. The town dweller works in ill-ventilated rooms, and his amusements are indoor in a vitiated atmosphere. With an insufficient liver, a meat dietary, and insufficient oxidation, the town dweller is the subject, more than all others, of the uric acid formation, with all its varied consequences. At Victoria-park Hospital I have under care at the present time a mite of a girl, not yet thirteen years of age, in whom all the phenomena of the migrainous neurotic are already present. The effect of town life is to produce a distinct retrogression to a smaller, darker, precocious race of less potentialities than the rustic population. Precocity is seen in early puberty, but reproduction is impared; and Hayles Walshe, Mr. Cantlie, and others have shown that it is well-nigh impossible to find a true Cockney of the fourth generation. Dr. Ralfe informs me that of 800 inquires made at the London Hospital only four resulted in genuine Cockneys of the fourth generation. The retrocedent race perishes either by sterility in the females, or their sparse progeny succumb to the diseases of childhood. These urban dwellers, the progeny of town-born parents, this retrocedent race, are the possessors of congenitally insufficient livers, and as a consequence are the victims of the uric acid formation. This liver reversion is the microcosm within the macrocosm and Bright's disease is especially the disease of this urban race. Teetotalism and vegetarianism are no matter of mere caprice or fashion; but are the unconscious submission to an unseen law ruling the choice. The urban dwellers cannot tolerate the beef and ale of their rural forefathers. No doubt in many cases alcohol and syphilis play their part, and too often an important part. But these are only accessories to the great fact that the descendants of town dwellers die prematurely old of Bright's disease, and that the spring runs down at a much earlier period with them than with rural populations.

Many persons are remarking how common gout is becoming amidst us at the present time. Such is certainly my personal experience; though articular gout is by no means the common outcome of the uric acid formation in town dwellers. Sufferers from articular gout are comparatively infrequent among the crowd of persons who are undergoing that vaso-renal change to which "chronic Bright's disease" is the term most commonly applied. In other cases neurotics are found with the uric acid formation, who seem to owe their "insufficent" liver to hard intellectual toil on the part of their fathers. Nearly every American lady of this class has given me a history of the long and usually successful efforts of her father. "The fathers have eaten sour grapes, and the children's teeth are set on edge." There seems some law of antagonism betwixt the tissues of the epiblast and those of the hypoblast. Long sustained demand upon the brain as "the organ of mind" tells upon the viscera. The liver suffers therefrom; and the progeny of the hard-working brain-toiler comes into this world with an unsufficient liver. Clifford Allbutt, F.R.S., some years ago pointed out clearly the mental causes of Bright's disease, in an address which attracted much attention at the time and since. Not only does my experience fall in with his as to the individual, but it seems to teach a further lesson—viz., that hard sustained brain toil has its Nemesis in an insufficient liver, which reverts to the uric acid formotion. The bright, high-souled migrainous-neurotic, one of the most charming patients who enter the physician's consulting-room, owes her fortune and her liver alike to her father's toil, which is rather a hard nut to crack for those whose ambition it is to make a fortune.

Thus we see there are many factors—and some of them little suspected—at work in the genesis of Bright's disease. Nor is it inaccurate to say that it is a disease becoming daily more common in "this madly striving age." More familiarity with its causal relation ought to develop definite preventive measures.—J. Milner Fothergill in, *Lancet.*

SANTONATE OF CALCIUM is said to be more efficient as a vermifuge than santonin, while at the same time it agrees better with the stomach.

INTERNAL DERANGEMENTS OF THE KNEE-JOINT AND THEIR TREAMENT BY OPERATION.

Dr. Annandale reports four cases of displaced semilunar cartilage successfully operated upon by the following method :

"An incision is made along the upper edge of the tibia, on the side corresponding to the cartilage displaced, and it should extend from the border of the ligamentum patellæ outwards or inwards, according to the cartilage affected, for a distance of about three inches. The tissues having been divided, and the synovial membrane exposed, all vessels should be secured before the joint is opened. This having been done, the synovial membrane is incised in the same direction as the external wound, and the parts examined. A blunt hook is then inserted, and hooked round the anterior margin of the displaced cartilage, which is in this way brought into its proper position, and held there while two or three interrupted catgut sutures are passed through it and the periosteum and fascia, over the edge of the head of the tibia. In this way, the cartilage is firmly secured in its proper place. The edges of the external wound are then brought together by sutures, and the dressing and a splint applied."

These four cases bear out the following facts :

"1. That one or other of the semilunar cartilages —most frequently the internal one—is liable to be displaced, and to cause more or less interference with the movements of the knee-joint.

"2. That this displacement may be slight—as is most common—or severe, and that the amount of displacement depends upon the extent of separation of the attachments of the cartilage.

"3. That it is the anterior attachments of the cartilage which are most frequently separated."

The diagnosis he considers is usually readily made, yet it is sometimes impossible to reach a positive conclusion, and in these cases he advises an exploratory incision, if the disability is really seriously interfering with the patient's comfort or usefulness, which will enable one to ascertain the cause of the trouble and at the same time remove it.

The writer also reports three cases of growths in the interior of the knee-joint successfully removed by an incision made as for the fixation of a cartilage.

The first case was that of a woman aged twenty-one, who, one year before the operation, had twisted the joint. Since that time had had much pain and limited motion with a tendency of the joint to "catch," and was thus prevented from taking active exercise.

The joint was normal in appearance except for slight fulness just internal to the ligamentum patellæ, at which point pressure caused pain.

On opening the joint the cartilage was found in its normal place, but "a small mass of fatty and fibrous texture was lying over the inner and anterior margin of the cartilage where the fulness existed. This growth was connected to the synovial membrane, and was moveable, and could be drawn forward." The growth was drawn forward and stitched to the periosteum on the upper edge of the tibia, to fix it and prevent its passing between the joint surfaces. The patient recovered with perfect motion.

The second case was almost an exact reproduction of the first, but in this the greater part of the growth was cut away before its base was fixed by sutures.

The third case differed from the others in that a moveable body could be felt on the outer side of the joint, which, on removal, proved to be a myeloid sarcoma. This case also did perfectly well.

Judging from the results in these three cases, and in others mentioned below, the writer concludes that when such a growth is recognized in a knee-joint, it should be removed or fixed by an operation if there is no other joint disease except synovitis.

In the *American Medical Record* for June, 1886, there is an interesting paper on the subject, by Dr. R. F. Weir. Dr. Weir records two cases of his own and one of his colleague, Dr. Bull, in which tumors were removed from the knee-joint. In one case the tumor was composed of "vascular connective tissue, rich in fat and connective-tissue cells." In the second case the growth was a "fibro-sarcoma," and in the third the growth was a "giant-celled sarcoma." Weir also refers to other cases published by Simon, Volkmann König, and Lauenstein. Barwell ("International Encyclopædia of Surgery") mentions that he removed two fatty growths from the knee, one being situated upon each side of the ligamentum patellæ. He expresses the opinion that some of these growths are formed in the subsynovial tissue, and gradually bulge into the joint. Volkmann, under the term "lipoma arborescens articulorum," has described a condition of multiple fatty growths having their origin in connection with the fringes of synovial membrane.

The last case in the paper is that of a woman aged fifty-five, who for several months had had pain and stiffness in the right knee-joint, and latterly had noticed that free movement of the joint was prevented by some thing "catching inside the joint." Just outside the ligamentum patellæ a hard body was felt, and an incision parallel to the outer border of the ligament was made, exposing this body, which was an outgrowth of the articular surface of the femur. It

was removed by a chisel, and measured one-half inch in length and one-quarter of an inch in diameter at the base. The patient was discharged much improved.

It is well known how commonly out-growths of chronic arthritic origin cause interference with the movements of this and other joints, and it cannot be said that such cases are very favorable for operative interference; but still I think that in cases where a single and distinct growth is causing much pain or stiffness, the question of an operation may be taken into consideration, and the case just recorded proves that the removal of such a growth may be successfully performed, and may also, even if not perfectly relieving the symptoms, improve them. It is not an operation that I would wish to urge very strongly, and the general condition of the patient, the condition of the joint, and his or her wishes—the question having been properly explained—would influence me in advising its performance.

Lastly, in opening the knee-joint for the removal of growths, the incision will be best made over the position of the growth, if it can be felt. Should its exact position not be determined, and the case be one suitable for operation, I would suggest that the incision advised for the fixing of the internal semilunar cartilage be employed, as it was found very convenient in the three cases reported.—*Brit. Med. Jour.*

MEDICAL NOTES.

For *migraine*, a remedy of the foremost importance and value is Cannabis indica.

Urethral hemorrhage arising from a urethrotomy was arrested by Prof. Gross by passing a hot bougie.

Prof. Bartholow states that we should try gelsemium in the severe cases of *chorea* which resist the ordinary treatment.

Caff.-iodoform, a mixture of two parts iodoform and one part coffee finely powdered, makes an efficient external application, in which the odor of the iodoform is almost entirely covered.

Prof. Bartholow treated *gonorrhœal rheumatism* by small blisters around the affected joints, using cantharidal collodion, and gtt. xv of tinct. chloride of iron, four times a day.

Quinine gr. viij, stimulus f℥viij per day, and gtt. xx of dilute nitrohydrochloric acid every three or four hours, is a routine plan of treatment for *typhoid fever* in the Pennsylvania Hospital.

As a *stomachic tonic* Prof. Bartholow prescribed the following:

℞ Acid. phosphoric. dilut. . . f℥j
Strychninæ sulph. . . . . gr. j. M.

Sig.—Ten drops in water before meals.

Dr. Longstreth recently showed the class at the Pennsylvania Hospital some cases of *tonsillitis* which had simply been treated by applying turpentine stupes to the neck, with gratifying results.

In giving *quinine*, it is well to combine with dilute hydrobromic acid; it renders the disagreeable cerebral effects much less, does not interfere with its action, and renders it more soluble, while it really adds to its efficacy.

A case of *strumous synovitis* of the knee-joint was recently treated locally by Prof. Gross as follows, with good results:

℞ Iodoformi.
Vaseline . . . . . āā ℥j. M.

Sig.—To be rubbed into the part.

Prof. Bartholow prescribed as follows for an *aneurism of the ascending aorta*: gr. ij of Squibb's aqueous extract of ergot three times a day, and gr. xx of iodide of sodium four times daily, both to be kept up for a long period.

The best treatment for a *bunion*, in Prof. Gross' opinion, is the following: The patient should wear a broad boot, apply a blister to the bunion, remove the skin, and then freely apply a mixture of cosmoline and tannic acid, equal parts.

Perhaps it is not known that the disagreeable effects which a *sea voyage* or a railway journey have on some persons can be averted by getting the patient under the effects of a bromide before starting, and continuing in small doses during the trip.

A case of *infantile eczema* of six months' duration was cured by Dr. Meigs in one week with the following:

℞ Unguent. zinci oxidi.
Ung. petrolati . . . . . āā ℥ss
Hydrarg. chlorid. mitis . . gr. x. M.

Sig.—Apply freely.

Belladonna given internally will often give very satisfactory results in *prurigo senilis*. It may be given with nux vomica as follows:

℞ Extract nucis vomicæ.
Extract belladonnæ, . . āā gr. ¼
Ft. pil.

Sig.—Take morning and evening.

When no reasons can be found to exist by which *impregnation* is prevented in cases of sterility, it may be advisable to order the patient to abstain from copulation, except for two days following the menstrual flow. If this fails, coition may be allowable during menstruation.—Parvin.

Thaline in gr. iv doses has a remarkable influence over *high temperatures*, as shown in two cases exhibited by Prof. Da Costa at the Pennsylvania Hospital, in one of which a temperature of 105°

occurring in cerebral rheumatism was reduced to normal in three hours by the above dose. Its action is accompanied by profuse sweating, and no bad after results.

For a crying, irritable, peevish infant, Prof. Bartholow speaks very highly of the following:

℞ Sodii bromidi . . . . . gr. v.
Mist. asafœtida . . . . f℥j. M.
Sig.—*Pro re nata.*

If there be no flatulence, simply give the bromide in camphor water.

In using *felt splints*, they should be softened in hot water before applying, then allowed to harden on the limb. They should then be removed and coated with shellac varnish to give them the property of supporting power. Otherwise they are of little use, for they allow the fragments to become easily displaced.

Prof. Parvin claims that one of the best local applications for *diabetic vulvitis* is a four per cent. to ten per cent. solution of cocaine hydrochlor. For *aphthous vulvitis* local applications of iodoform are always successful. It relieves the itch and the pain. Dust freely on the parts once a day, and in the meantime keep the labia separated by antiseptic cotton.

Prof. Da Costa believes *adonidine* to be a marked addition to our *heart tonics*, but it can never supersede digitalis, because it lacks its diuretic properties. The nearer the heart is dilated and the more a tonic is wanted, the more is adonidine indicated. In a case recently presented at the Pennsylvania Hospital with dilatation and mitral lesion, gr. $\frac{1}{10}$ three times daily, afterward four times a day, was given with most marked benefit and improvement. The heart's action became stronger and more forcible, the pulse became full and regular, and the dyspnœa and vertigo ceased. As its name indicates, it is derived from the plant Adonis.—*Coll. and Clin. Record.*

NEUROTIC SYMPTOMS ATTENDING THE MENOPAUSE.

This patient comes to us with the history that she is sixty years of age, that she has had three children, the youngest of which is thirty years of age. The menopause occurred ten years ago. She complains of a burning pain in the pelvis. On vaginal examination, I find a cicatricial band at the neck of the womb. We not infrequently find women about this age complaining of a burning pain in the abdomen, running down through one iliac region to the vulva. This, to my mind, is a neurosis, and it is one that is very difficult to cure. The change of life usually does not require a long time, and, as a rule, at the end of that time the woman is well; but she may present a condition of this kind. Under these circumstances I always give the bromides, and a favorite prescription with us is the following:

℞—Ammonii chloridi, ... 2 dr.
Ammonii bromidi, ... 4 dr.
Tinct. gentianæ co.,
Aquæ, ... *aa* 3 oz.
M. Sig.—A tablespoonful, in water, before each meal.

I always give with the bromides a bitter tonic, to counteract their depressing effect. I am fond of using the ammonium chloride, on account of its stimulating effect on all the emunctories. The ammonium bromide is used instead of the potassium salt, because it makes a neater prescription, and also because its effect is less depressing. Another formula, which I frequently employ in these cases, I may as well give you now. It is my pil. sumbul comp., sugar-coated, by Bullock and Crenshaw:

℞—Acidi arseniosi, ... 1.40 gr.
Ferri sulph. exsiccati,
Extract sumbulli, . . . *aa* 1 gr.
Asafœtidæ, ... 2 gr. M.
Ft. pil. j.
Sig.—One after each meal. If this does not have the desired effect, the dose may be increased.

I am disposed to think that the burning of which this patient complains is purely a neurosis. It seems incredible that at this time of life it could come from the ovaries, but it may come from the plexus of nerves in the neighborhood of these organs. There is another form of burning to which I desire to refer. Women about the change of life, or past it, will speak of a burning of the vulva, usually accompanied with itching. My advice is, under such circumstances, always to examine the urine for sugar. If the woman is at all stout, there is probably sugar in the urine. It has been supposed that it was the presence of the sugar in the urine trickling over the parts that caused the pruritus. This may be so in a few cases, but in the majority of instances the itching is a neurosis. In the treatment of these cases, local applications, with remedies directed to the glycosuria, are required.

There may be at this period of life a burning, accompanied with itching, which may be due to a senile catarrh with an acrid leucorrhœa. The discharge comes from the cavity of the womb, and while it may not be sufficient to attract attention, it may be sufficient to cause itching. I have found that curetting the womb was the best way of getting rid of this form of burning. With this I associate internal applications.

These women will often come to you with the statement that they have a tumor, when the whole

trouble is that they have nervous flatus, causing distention of the abdomen. I wish that I could find a theory which would satisfactorily explain how it is that, in certain conditions of the nervous system, there will be the sudden distention of the abdomen with flatus. I am disposed to think that gas may be rapidly generated in the human body. Otherwise it seems impossible to explain this. The patient's attention is called to the swelling by the fact that the clothing is tight, and she will come to you with the statement that she has a tumor. Indeed, I have had physicians send me patients whom they thought had a tumor, when the whole trouble was due to a collection of wind. In such a case there would be resonance all over the front of the abdomen. This is a diagnostic sign. Another is, that by taking hold of the abdominal walls, you can lift up a large fold of skin, so that there would be no room behind it for a tumor of any size. Then if you percuss, you will find no evidence of a tumor. Of course, this does not serve to exclude a small tumor, but the patient consults you on account of a large swelling.—*Dr. Goodell, in the Polyclinic.*

NEW UTERINE REPOSITOR.

The plan of reducing a retroversion or retroflexion of the uterus by the rotation of the sound within that cavity, besides occasioning a good deal of pain to the patient, has also the serious disadvantage of almost certainly causing abortion (should the patient happen to be pregnant at the time); and this is by no means an easy thing to determine beforehand, should the patient have borne children previously. In cases of very recent retroflection or version, it will sometimes be sufficient to place the patient in the knee-elbow or knee-chest position, when by raising the perineum and posterior wall of the vagina with the duckbill speculum, the atmospheric pressure alone will ef-

fect the desired result. But where the complaint is of longer duration, it will require some additional pressure to replace the organ. In these cases I avoid having recourse to the sound, by using the instrument depicted in the accompanying woodcut, which acts on the principle of the Hodge's pessary. The patient being in the knee-elbow position, the top of the instrument is placed in the posterior *cul-de-sac*, when by slight but firm pressure in the downward and forward direction (using the heel of the duckbill as a fulcrum, if necessary), it will be found that reduction is easily accomplished with the minimum amount of pain to the patient. On the instrument being removed, and while the patient retains the same position, a Hodge's pessary, of suitable size, can be introduced with facility, and, on the patient resuming the erect position, the sense of relief will be at once experienced. The instrument will also be found useful for applying steady pressure to tumors occupying either *cul-de-sac*, and with ordinary care, it will be almost impossible to do injury to the surrounding structures. Having experienced the value of the instrument in the cases I describe, I have confidence in recommending it to others. By the use of the means described, I have reduced a retroflected uterus of eight years' duration, where the usual means, position, and use of sound had failed altogether.

A. DUKE, Dublin.

TRAINING.—The victory of Cambridge this year in the boat-race has given rise to many comments as to the mode of training best adapted to get crews into condition. It has been stated that Mr. Bristowe, the President of the Cambridge University Boat Race, allowed fish, entrées, puddings, and dessert for dinner through the whole course of training, and did not insist upon the monotonous and excessive flesh diet usually enforced, For some years past there has been a growing tendency to adopt a more rational plan of feeding and to permit a greater range of carbohydrates and hydrocarbons in the diet. Indeed, the more varied the food the better the health of the individual, and as training was defined by Professor Parkes as a method of obtaining the highest degree of vitality, a scientific mixture of the various principles of diet is called for. With hard muscular work at a quick pace more animal food is necessary than for ordinary work, but this should never be given in excess, and beyond what the digestive secretions are able to dispose of; one pound and a half is certainly as much as is required. In giving carbohydrates, care should be taken that they are well cooked and are of a digestible character. Rice, sago, and tapioca puddings are excellent; but potatoes should not be indulged in in any quantity, as they are apt to cause flatulence —that bugbear of the trainer knows as "inwardful." The hydrocarbons should be supplied by a liberal allowance of butter; the men should be encouraged to eat the natural fat on the chops and steaks, and not cut it off as they have been directed to do, whilst meat with plenty of fat on it is usually more tender than lean. Fresh fruits should also form part of the daily dietary, since these supply the alkaline salts so useful in keeping the blood in a healthy state. The chief article to be avoided in training is sugar, especially sugar with pastry; it tends to cause acidity and promotes "biliousness." The question among trainers is the amount of fluid permitted. Under the old

system great cruelty was often practiced by keeping men, especially during hot weather, on a strict allowance; this was a mistake. On the other hand, man should not be allowed too much freedom in this respect, for fear of diluting the digestive fluids; it is well, therefore, to keep this within physiological limits. A man of 12 st., under ordinary circumstances, eliminates about three pints and a half from the body daily by the skin, lungs, and kidneys; with strong and quick work, he probably gets rid of a pint and a half more. Five pints of fluid would therefore be sufficient for most men. As training advanced and the elimination became less, the quantity might gradually be reduced. At the beginning of training slight excess of the physiological requirements might be permitted, as it would help tissue metabolism and carry off the waste products formed in consequence of increased muscular activity.—*Lancet.*

Physiological Action of Nitrous Oxide Gas.—Dr. Dudley Ruxton has communicated two valuable papers upon the above subject to the Odontological Society, based upon numerous clinical observations and experiments. The effects of nitrous oxide inhalation upon the mammalian organism are, he says broadly speaking—1, a condition of anæsthesia; 2, an emotional state, provoking a sensation of exhilaration—in fact, it plays the *rôle* of a stimulant; 3, it gives rise to modifications of the respiratory and 4, circulatory systems; and 5, provokes marked muscular movements which may be classed as (*a*) rigidity and (*b*) jactitations. The anæsthesia produced by nitrous oxide is not dependent upon analgesia or loss of sensation of painful impressions of the sensory end-organs, such as that produced by cocaine, etc., or upon failure of the conducting sensory nerves, for sensation is retained until the perceptive powers themselves cease to receive; moreover, there is immediately anterior to the loss of consciousness a hyperæsthetic stage, therefore it may be concluded that the nerve centres are acted upon. The way by which nitrous oxide may enter the system, and is enabled to produce its special effects are—either that it gives rise to other bodies by changes in its chemical form, or by acting as an irrespirable gas and causing asphyxia, or by exercising a specific action, just as strychnine does. Dr. Frankland came to the conclusion that nitrous oxide was not decomposed during its sojourn in the body, basing his opinion upon analyses made of the air expired by rabbits when confined in an atmosphere of mixed air and nitrous oxide. In the first stage of asphyxia, that of dyspnœa, there is an increase in the respiratory movements, both inspiratory and expiratory; in the second of dominance of the expiratory efforts, culminating in general convulsions, in the last, exhaustion, with long-drawn inspirations, gradually dying out. The blood-pressure during the first and second stages rapidly rises. Dr. Dudley Buxton has never observed an increase in the expiratory movements when N_2O has been administered, which are merely increased in number and depth, or expiratory convulsions, notwithstanding the gas has been pushed to its utmost limit, and from a larger number of sphygmographic tracings the tension in the arteries has been lower than normal. In experiments upon dogs, Dr. Buxton found that where a trephine-hole was made through the skull, during the inhalation of the gas the brain pulsations became more forcible and somewhat hurried; then the brain substance was seen to swell up, until at last it actually protruded through the aperture; whereas in a similar experiment, with the trachea occluded, the brain receded, sinking away from the opening. Other experiments showed that the heart's action was but little interfered with by nitrous oxide, even when inhalations were pushed until respiration was interrupted; during asphyxia, on the other hand, a rapid and continuous increase in blood pressure invariably occurred. The dose of nitrous oxide required to produce insensibility varied very considerably in different persons—a fact which supports the view that nitrous oxide exerts a specific action on the nerve centres. Dr. Buxton also discusses many other interesting points in the action of the gas, such as the occurence of hallucinations.—*Lancet.*

A Simple Method of Preventing Arterial Hemorrhage.—Dr. Muscroft, of Cincinnati, described in the *Lancet-Clinic* of April the 2nd, 1887, the following method of preventing arterial hemorrhage, which was entirely satisfactory in a successful amputation at the hip-joint, and a high amputation of the arm for elephantiasis:

"He proposed to pass a strong pin or needle under the femoral vessels *en masse*, high up in Scarpa's triangle, and then, by winding a cord around the exposed ends of the needle, protected by corks in a figure-of-eight turn, to secure sufficient pressure to occlude the artery completely. This method of compression before the operation could not possibly do any harm, and if properly applied there could be no danger of hemorrhage. The additional advantage would be secured that there were no tourniquets or bandages to slip when their points of resistance were removed by the disarticulation of the head of the femur, and the apparatus for controlling the hemorrhage was not at all in the way of the operator or his assistances."

As soon as the patient was fully under the influence of the anæsthetic, a needle one-eighth of an inch wide, slightly bent at the point, about the thickness of a dime, and four inches long, was introduced perpendicularly into the front of the thigh, about an inch and a half below Poupart's ligament. The exact point of entrance was one-

fourth inch internal to the combined sheaths of the vein, artery, and nerves. The point was pushed beyond the vessels, then turned outward until the needle had passed beyond them; the point was then pushed out through the integument. The needle was then behind the vessels and nerve. A piece of cord was passed under the heel and point of the needle, forming a figure-of-eight ligature. Before the ligature was applied the femoral artery could be felt pulsating strongly, but when it was tightened the pulsation below the needle had ceased entirely.

The compression with the needle and figure-of-eight ligature was entirely successful in preventing any bleeding from the brachial artery. The needle was introduced from before backwards, and parallel to the borders of the axilla. The point and heel of the needle were protected, as on the former occasion, by corks.—*Med. Progress.*

ARE SYPHILITIC ATTACKS MADE MORE PRONOUNCED BY THE WITHDRAWAL OF ALCOHOLIC STIMULANTS FROM THE INEBRIATE?—Dr. C. F. Barber, of Brooklyn, sends the following communication: "Voluminous as are the writings upon syphilis, I fail to find mention, save in a minor way, of the deleterious effects of alcohol upon the disease. True, we are cautioned again and again to induce our syphilitics to refrain from the use of alcoholic drinks, or, if habituated to their use, to curtail them as much as possible. But no stress seems to be laid upon the outcome of their abuse. It may be my misfortune to meet unfortunate cases, or perchance those made worse by neglect, but the fact impresses me most forcibly that the abuse of alcohol, while not retarding or checking the progress of the disease as to its ultimate results, causes relapses to occur more suddenly and with greater violence than they otherwise would. It may be objected that no inebriate (for it is from this class of patients I draw my inferences) takes care of himself as he should, to say nothing of following the directions of his physician. Granting the point of this statement, I nevertheless maintain that, while many neglect themselves to a dangerous degree, yet there are those who exercise more or less care and attend to their unhealthy condition. I have during my observations, extending through several years of service among this class of people, been forcibly impressed with the fact that syphilitics, as a rule, after the withdrawal of alcoholic stimulants by gradual reduction, suffer in a sudden and severe manner from the disease in some of its many forms. Whether alcohol has any controlling effect upon the disease I am unable to state positively, but certain it is that in some patients there seems to be a period of *stasis* during their excesses. I have in mind several cases in which the disease was dormant for a long period, and suddenly reappeared after a prolonged debauch. In one case this was marked by a most severe laryngitis, causing loss of voice, difficulty in swallowing (to such an extent that nothing but fluids could be taken, and these only in small quantities), swelling of the tongue, and sordes upon the tongue and inner side of the cheeks. This patient retired in apparantly good health, but upon awaking the next morning found himself in the condition I have described. Another case is that of a man who invariably, after one of his debauches, is the subject of a syphilitic ulcer on the anterior pillar of the fauces. A third has to combat a serpiginous ulcer over the crest of the tibia. A fatal case which came under my observation was that of a laborer who had contracted syphilis previous to a prolonged debauch, which terminated only after he had been sent to an institution for the cure of inebriety. After being restored to apparently his healthy condition, and while at work among his fellow-inebriates, he was complained of on account of a terribly offensive odor which emanated from him. This could not have been a result of neglect of cleanliness, for he was compelled to bathe frequently. Upon examination he gave a syphilitic history, but said that he had not been troubled for some time by any manifestations of the disease. Upon the removal of his clothing there were found syphilitic papules scattered over his body, and his scrotum was found to be a complete mass of ulcers. There were also ulcers upon the inner side of each thigh. The testicles were no doubt involved; but the condition of the scrotum forbade handling, and the internal parts of the sac could not be examined. This condition had all come on within three days, as the patient had had his bath and a change of clothing, under the eye of a reliable person, but three days previous, at which time he was apparently in a perfectly healthy condition. Many other cases, varying as to intensity, might be cited, but these are sufficient to illustrate my belief. It is well for those who have the troublesome malady of inebriety to contend with to be on their guard, and at the first indication of a syphilitic nature take the case well in hand, and, by proper treatment, alleviate the sufferings which through neglect might cause results of the gravest nature."—*Med. Rec.*

VENTILATION OF SHIPPING.—The ventilation of ships of war and of merchant vessels has hitherto presented almost insuperable difficulties, from the fact that considerations of speed, stability, draught, carrying power, and strength must necessarily be of paramount importance. In the P. and O., Cunard, and other "liners," indeed, the ventilation of the deck cabins leaves little or nothing to be desired, but such an arrangement is obviously out of the question in an ironclad, while the berths of second-rate passenger vessels and merchant ships

are for the most part simply unfit for human occupation. All methods as yet proposed for the ventilation of the 'tween decks, if they do not, like those of Perkins and of Theirs, depend on the rolling movement of the hull, at least require progression as an essential condition of their efficiency, and are totally inactive when most wanted, as when moored in a tropical port. Fans enclosed in shafts have, it is true, been tried with some degree of success, but the space they occupy and the amount of mechanism which their multiplication would necessitate preclude their application to each cabin or compartment. A novel method, which may be seen at work at Messrs. Green and Sterkman's offices, 91 Queen Victoria Street, E.C., seems to offer complete solution of the problem. Its principle consists in the convey, ance of compressed air from a central compresser, by common iron gas-pipes, to the several chambers, where it is discharged through nozzles in specially constructed tubes or channels communicating with the open air. The secondary current set up in these is more than twenty times as great as that proceeding from the nozzles themselves. These channels may be arranged to act as impulsion or exhaustion tubes, so that the air of the compartment can, if desired, be entirely changed in five or ten minutes. On board steamers and in factories the compressor may be worked by the engines employed for other purposes at the same time.—*Brit. Med. Jour.*

Disguised Formulæ.—An American professor recently discussed in a clinical lecture the advisibility of letting patients know what medicine they were taking. Obviously this must depend to a great extent, upon the patient; no small amount of tact and discretion is required in order to distinguish between those who would and those who would not be benefited by an explanation of the means to be employed. In dealing with a man of intelligence and education, there is always a temptation to enlist his confidence by affording him an insight into the nature and scope of the measures to be employed. But few medical men, probably, have escaped the disappointment of seeing their very reasons made use of to discredit their skill and impugn their ability. As a matter of fact, practitioners of mature age and experience of life seldom commit themselves to anything of the kind, or if, to gratify a patient's whim, they appear to yield to the temptation, their explanations are advisedly ambiguous. There is always a possibility that the patient may glean some information from the prescription. The official *Pharmacopœia* recognises the necessity of concealing the nature of certain preparations. Opium may be ordered under several different denominations without giving rise to the slightest suspicion of its presence. Mercury, another drug in reference to which prejudice is general, has not been equally protected. "Hydrargyrum" is nearly as well known as the magic word "aqua." It is suggested that calomel might be written "panchymagogus querce anus," but the expression, though etymologically interesting, might prove as much of an enigma to the chemist as to the patient. The employment of the names of individuals is an effective if unscientific way of disguising the real nature of the substance ordered, where this is deemed desirable. Dover's or James' powder would checkmate the most curious and best informed of laymen, and with a small amount of archælogical research it would be easy to baffle the most persevering querist. The tendency, however, is to discard these vestiges of a cruder system, and to leave to the patient the responsibility of following the directions which have been given him. As the art of medicine advances, the practitioner learns to adopt simple and practical methods of treatment which shall acquire for him the confidence formerly obtained only by mystery of demeanor and speech.—*Brit. Med. Jour.*

The Neurotherapy of Epilepsy.—Dr. C. L. Dana, in the *Quarterly Review*, gives the following plans of treatment of epilepsy, of different authorities.

The zinc treatment of Herpin was as follows; Give gr. ij 1-5 of zinc oxide ter. in die. Increase the dose by gr. three-fourths every week until gr. xj are taken t. i. d. Keep this up at least three months. It appears that Herpin subsequently used to add or alternate with ammonia-sulphate of copper or selinum.

The belladonna treatment of Trousseau:

Ext. belladon. fol. } . aa gr. 1-6. M.
Pulv. belladon. fol. }

Sig.—One a.m. and p.m. for one month.

Then increase the dose by one pill daily each month until twenty pills are taken night and morning. The treatment must be continued for a year.

Grover's method consists in giving the bromides in single doses at intervals of from two to five days, these single doses being gradually increased. Thus the patient takes one drachm on the first day, one and a half drachms on the third day, two drachms on the sixth day, three drachms on the ninth day, four drachms on the fourteenth day, and so on until the maximum dose of about one ounce is reached, when the drug is decreased in the same way.

I have found this a very good method if, during the intervals, tonics and adjuvant measures are employed.

The method of Meynert, in many cases is to give fifteen grains of bromide of potassium three times daily, and increase the dose by fifteen grains every time a fit occurs, until they are suppressed.

A mixture treatment like the following is recommended by Ball and Hanfield Jones :

1. Ammon. bromid.
   Sodii bromid. . . . . aa ℥ ijss
   Infus. valerianæ . . . . ℥ x.

M. Sig.—℥ ij daily, increasing until ℥ ijss of the bromides are taken daily.

2. At the same take a pill :
   Ext. belladonnæ . . . . gr. ¼.
   Zinci oxidi . . . . . grs. iij.

M. Sig.—One, morning and night.

3. A drastic purge weekly.

An acid mixture for epileptics, which he found efficient in two cases which resisted other forms of medicine, was :

Acid. hydrobromic. dil , 10 per cent. ℥ j.
Atropinæ hydrobrom. . . grs. 1-200.
Zinci citrat. . . . . grs. iv.

M. Sig.—Take this t. i. d., and gradually double the dose.

A mixture alleged to be very efficient is :

Potass. bromid. . . . . grs. xv.
Sodii arsenit. . . . . grs. 1-120.
Picrotoxin . . . . . grs. 1-180.

M. Gradually increase—*Alienist & Neurologist.*

SCHEDE'S METHOD OF DRESSING WOUNDS.—Prof. Mikulicz communicates to the Przeglad Lekarski an account of fifty cases of surgical operations which were treated by the method recommended by Dr. Schede at the last surgical congress in Berlin, viz., to allow blood to fill the wound and to lie between the lips after they were brought together, any deficiency in the quantity of blood being remedied by the use of the knife, the idea being that the blood either actually becomes organized or serves as a protection for the granulations as they are formed. The wound is covered with protective, to prevent evaporation. Prof. Mikulicz's observations included six resections of joints, four amputations, six dissections, two ligatures of arteries, seven extirpations of large tumors, etc. In thirty-six of the fifty cases union took place without suppuration, in four there was extensive formation of pus, in five superficial suppuration starting from the points of suture, and in the remaining cases pus had existed previously to the operation, and the disinfection at the time not having been complete, it continued subsequently. The general condition of the patients was highly satisfactory, even in those cases where suppuration occurred, the temperature in no case rising much beyond normal. The dressings were not removed or changed for at least a fortnight, sometimes not for a month. This appears to be of great advantage in the case of bone and joint operations where complete immobility of the parts is a desideratum. Other specified advantages attributed to this plan are that wounds attended with a loss of substance rapidly fill up, and the cicatrices that form are peculiarly soft and smooth. Prof. Mikulicz does not find, as Schede did, that the existence of silver sutures in osseous lesions has any unfavorable influence on the cicatrisation of the wound. He remarks that it is important not to bind the external dressings to tightly to the wound.—*Lancet.*

PLEURISY ONLY A SYMPTOM.—Dr. Frederick C. Shattuck of Boston (*Boston Med. and Surg. Jour.*) in his report on thoracic disease says : Those of our readers who have studied in Germany must have all been struck with the doctrine there so generally held, that simple primary pleurisy is a very rare affection. This view is not so widespread in France, but has there adherents. Germain See, for instance, classes pleurisy among the infectious diseases. Landouzy reports two cases confirmatory of this view, and formulates his opinion on the question as follows :

(1) "All demonstration is wanting of the dependence of acute primary pleurisy with effusion on exposure to cold, as is so commonly held.

(2) "Pleurisy attributed to exposure to cold is not a disease, like pneumonia, by the side of which nosographers persist in placing it, but simply a morbid, and always secondary condition.

(3) "Pleurisy, whether acute in onset and characterized by large effusion, or local, subacute, or chronic, is a symptom of disease.

(4) "Without absolutely denying the occurrence of pleurisy as due simply to exposure to cold, I believe it to be most exceptional, as rare as it is thought to be common.

(5) "The part played by exposure to cold is, in pleurisy, as in erysipelas, pneumonia and zoster, quite subordinate : the true etiological factor lies in a cause which was latent until the day when the exposure took place.

(6) "This genuine etiological factor, this determining cause is tuberculosis, often masked by the pleural effusion, and thus escaping recognition."

He goes on to say, further : "Any patient with pleuritic effusion is tuberculous, let him be vigorous, young, robust, and fat as you please ; let him declare himself otherwise perfectly well and quite free from hereditary or acquired predisposition, unless the pleurisy can be attributed to an infection, (scarlet fever, puerperal fever, etc.), a dyscrasia (rheumatism), or a trauma (fractured rib, infarction)."

If this doctrine be true, all we can say is that tuberculosis is recovered from more frequently than has been supposed.—*Epitome.*

DISINFECTION OF DWELLINGS AND OF INHABITED ROOMS.—Drs. Guttmann and Merke, of the City Hospital Moabit, in Berlin, have made an investigation as to the relative value of various methods

of disinfecting inhabited rooms, and have published the results in a paper in *Virchow's Archiv.* of March 2, 1887. The main points kept in view in the inquiry were that a satisfactory method should destroy the vitality of the bacteria, should not injure the house or furniture, should not be dangerous to the health of the persons in the house or of the person applying it, should involve the least possible labor in its use, and be as cheap is possible. The bacillus anthrax was taken as the test organism, and was dried is silk fibres and scattered through the room, on rugs, etc. Disinfection was attempted by rubbing the floor, ceilings, and walls with disinfectant fluid and by spraying the same on the rugs, etc. The solutions experimented with were a five per cent. solution of carbolic acid, and solutions of bichloride of mercury of various strength. Their conclusion is that a solution of bichloride of mercury, 1 to 1000, used as a wash and a spray, is the most certain, the cheapest, and in all respects the best for disinfecting inhabited rooms.—*Sanitary Engineer.*

English as She is Taught.—Mark Twain contributes to the *Century* a number of illustrative examples of the failure of teaching to educate the pupil, taken from a school-master's actual experience. From them we select a few with a medical bearing.

Physillogigy is to study about your bones, stummick, and vertebry.

Occupations which are injurious to health are carbolic acid gas, which is impure blood.

We have an upper and lower skin. The lower skin moves all the time and the upper skin moves when we do.

The body is mostly composed of water, and almost one-half is avaricious tissue.

The stomach is a small pear-shaped bone situated in the body.

The gastric juice keeps the joints from creaking.

The chyle flows up the middle of the back bone and reaches the heart, where it meets the oxygen and is purified.

The salivary glands are used to salivate the body.

In the stomach starch is changed to cane sugar and cane sugar to sugar cane.

The olfactory nerve enters the cavity of the orbit and is developed into the special sense of hearing.

The growth of a tooth begins in the back of the mouth and extends to the stomach.

Socrates destroyed some statues and had to drink Shamrock.

Ipecace : a man who likes a good dinner.—*Phila. Med. Times.*

The Danger of Hypodermatic Injections of Morphine in the Treatment of Strangulated Hernia.—Dr. Routier had operated twice for strangulated umbilical hernia ; the first operation was performed twelve hours after the strangulation and was a perfect success. He was not called to the second until five days after the onset of the trouble, and found gangrenous points scattered along about thirty inches of intestine ; he resected the entire affected part but the patient soon died. This patient had been treated with injections of morphine, which had relieved the pain and arrested the symptoms, and thus caused the grave error of permitting fatal temporization. He has ascertained that the use of injections of morphine is very common in strangulated hernia. Various cases have been published in favor of this treatment, but none are convincing ; it is impossible to understand how morphine can favor spontaneous reduction ; in that case it would be necessary for the strangulation always to lie in the ring and for the relaxation of the muscles to have an influence upon it, which is doubtful. Nothing, then, is further from being proven than the good results of this treatment ; on the contrary, its dangers are self-evident, since, by diminishing pain and vomiting, it permits temporization, which is always exceedingly dangerous, for the operation is acknowledged to be the more dangerous as it is delayed. The treatment of strangulated hernia by morphine should be very energetically rejected, and it should be held as an axiom that a patient with strangulated hernia should not be left until relieved.—*Annals of Surgery.*

Experiments in Hypnotism.—Hypnotism and Dr. Charcot continue the Parisian sensations of the day. A most interesting *séance* took place yesterday morning in the museum of the Salpêtrière Hospital. Dr. Charcot received a delegation from the Société de Médicine Légale, commissioned with examining the possibility of any one under hypnotic influence making or signing a will. A very curious experiment was made, in which a young girl, under Dr. Charcot's admonition, signed a paper, after having refused to do so for several minutes. She remembered having received the paper from one of the members of the commission. Dr. Brouardel then made her a present of fifty francs. The experiment tends to prove that, if such a thing is improbable, it is not impossible.

This study has become a passion among the medical men, who say it may greatly help legal procedure, inasmuch as by sending criminals to sleep and dragging their secret from them while under hypnotic influence there would be little fear of judges condemning the innocent for the guilty. A theft in the hospital was found out in this way by Dr. Marié, for many years Dr. Charcot's assistant. The subject refused at first to tell where the stolen object was concealed. After a little

diplomacy, however, on the part of the young doctor, who told the sleeping girl he was the young man from whom the card-case had been taken, and not to fear telling him where it was, she gave the detailed account of having stolen it, and told where the card-case was to be found. Dr. Marié immediately went to the spot indicated, where, sure enough, the stolen article was found. —*Paris Cor. New York Herald.*

THE TREATMENT OF ACNE.—LASSAR recommends the following paste for all forms of acne:

B naphthol.	10 parts.
Precipitated sulphur. . . .	50 "
Vaseline or lanolin	25 "
Green soap.	āā 25 "

This is to be spread upon the skin to the thickness of the back of a knife-blade, and left on for fifteen or twenty minutes, when it will cause a little burning. It is then to be wiped off with a soft cloth, and the skin powdered with talc. The skin soon becomes inflamed, then turns brown, and finally peels off. The desquamation can be hastened by the application of Lassar's paste with two per cent. of salicylic acid. When the desquamation has ceased, the acne will be found to be greatly benefited.—*Therap. Monatshaft.*

ALMÉN'S TEST FOR SUGAR IN THE URINE.—Dr. Norderling, of Rockford, Ill., in referring to the defects of Trommer's test for saccharine urine, sends the formula proposed by Professor Almén, of Upsala, which, he says, possesses many advantages. It is reliable, and will keep unchanged for years. The following is the formula:

R. Caustic soda, Gm. 8 (℥ij.) in water	Gm. 100 (℥iij.)
Potassio-sodium tartrate . .	Gm. 4 (℥iv.)
Bismuth subnitrate	Gm. 2 (℥ss.)

The urine is first to be tested by heat and nitric acid for albumen, and, if any is present, it is to be separated by filtration. In testing for sugar, one part of the solution is used to ten parts of urine. By means of this bismuth solution, Dr. Norderling affirms, sugar may be detected, when present in the proportion of only .05 per cent. The preparation of the solution should be intrusted only to a competent chemist.—*Med. Rec.*

A PATHOGNOMONIC SYMPTOM OF TUBERCULAR MENINGITIS.—In a paper read before the Chicago Pathological Society, Dr. Skeer called attention to a symptom which had not been mentioned in the literature on tubercular meningitis. The symptom is a small circle which forms in the iris, near to and completely surrounding the pupillary edge. It is very indistinct at first, but in from twelve to thirty-six hours, the whole margin of the iris will be involved, having become of a whitish or yellowish-brown color, and appearing irregular, thickened and somewhat granular. This cloud-like appearance is in some cases very evanescent, which makes it necessary to examine the iris at every visit. If it can be established that this symptom is co-existing always and only with tubercular meningitis it will be of great diagnostic value, for it is exceedingly efficient, and not less important to diagnose the tubercular from simple meningitis in the acute stage of the former disease.—*New Eng. Med. Month.*

POINTS IN THE TREATMENT OF GONORRHŒA.—It will be well to paste the following recommendations of Dr. Otis in your hat, that you may have them always handy for reference:

1. Fully explain to the patient the inefficiency of popular remedies, and the dangers attending their use.

2. Secure absolute personal cleanliness, thereby preventing infection of other parts, and insist upon as nearly perfect rest in bed as the exigencies of the case will permit.

3. Soak the penis frequently in water as hot as can be borne, but more especially during the act of micturition.

4. Recommend milk as a diet, and prescribe alkaline diuretics and mineral waters as internal medication.

5. Secure absolute freedom from sexual intercourse and from thoughts associated therewith.

Perfect faith in and obedience to these simple formulæ, he insists, will insure a successful ending of all uncomplicated cases before the seventh week.—*Med. and Surg. Rep.*

TRANSPLANTATION OF HUMAN BONE IN A CASE OF UNUNITED FRACTURE.—Professor A. Poncet, of Lyons, reports the case of a man of forty-three years who suffered from an ununited fracture of the tibia, the ends of the bones being atrophied and 35 mm. to 40 mm. apart. He removed the first phalanx of the great toe, on a limb recently amputated, sawed off the articular ends, and split the bone in two. One of these halves, 26 mm. long, was fastened between the freshened ends of the broken tibia, with due antiseptic precautions. Fibrous union took place at one end, osseous at the other. There was no necrosis.—*Med. Rec.*

IN THE BRONCHO-PNEUMONIA of children the treatment in Paris is ipecacuanha to the extent of vomiting the patient occasionally, the use of the bromide of potassium to quiet the cough, and the free use of alcohol. No opium is given. Mild forms of counter-irritation are applied to the chest. In croupous-pneumonia the treatment is expectant, and alcohol is used, though Professor Jaccoud gives tartarized antimony in the early stages when the patient is robust.—*Paris Correspondent of the Chicago Medical Journal.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet, Toronto."*

AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

TORONTO, JUNE, 1887.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE LATE DR. FULTON.

Since our last issue, the hand of death has fallen upon Dr. John Fulton, the editor-in-chief and proprietor of this journal. The illness which ended fatally was the result of a severe cold taken in the course of ordinary professional duties, and although it was severe, yet at first Dr. Fulton confidently expected to be all right in a few days. He did improve most wonderfully, so that on the Tuesday (the 10th inst.) before his death, he sat up in bed and occupied himself for at least two hours, in answering correspondence and other matters connected with the LANCET. But unfortunately, little as he expected such a thing, this was to be the last work to be done by the assiduous and ever faithful worker. For within a very short time afterwards delirium set in, and continued till Sunday, the 15th, when death closed the scene. His disease was typhoid pneumonia.

The loss of such a man as Dr. Fulton is one difficult to estimate. In every capacity he was faithful to duty. No family could have a kinder or more judicious head. He has left behind him a son and three daughters, whose well-being was the object ever nearest to his heart, and whose loss, in the sad and most unlooked-for removal of their only surviving parent, is simply incalculable. The family has, and will continue to have, the heartfelt sympathy of every one of their late respected father's wide circle of friends.

Dr. Fulton was born in the Township of Southwold, Elgin County, Ontario, on the 13th of Feb., 1837, the year of the rebellion. His father was a highly respectable farmer of Irish origin. His mother's family had originally come from Scotland, and their son John very early showed all the quickness of the one race and the shrewdness and perseverance of the other. He began his early education when very young, and continued for several years at school, always one of the best behaved and most advanced of the scholars.

He continued at home on the farm till he was 18 years of age, when his health, never robust, although as a rule good, was such as to warrant him in seeking a less laborious and more congenial occupation. He became a school teacher, having obtained successively several certificates, and was as usual, not very long before reaching the highest grade. As a teacher he was, wherever he taught, most successful—seeing clearly himself every point he desired to teach others, he had the somewhat rare but invaluable power of making it clear and simple to every pupil—a power which characterized him all through life in his subsequent career as a prominent professor of various branches of medical science.

He began his medical studies under the supervision of Dr. J. H. Wilson, of St. Thomas, a highly respected medical man, still engaged actively in his profession. From the moment of his entrance on his professional studies he was characterized by unremitting zeal—never being idle, doing as much work in the way of study in a week, as would take most young men a month to master. In due course he entered the medical school, so long and so successfully carried on by the late Hon. Dr. Rolph; And here, he at once ranked as one of the best men of his year. He was ever most ambitious, and was not content with matriculating as usual in medicine alone, but also matriculated in arts at the University of Toronto, taking a high position in this examination.

After completing his course he graduated at Victoria University, of which at that time Dr. Rolph's school was the "Medical Department." He also went up for his examination and graduated in medicine at the University of Toronto. He had hardly taken his degree in Canada, when he went to New York and spent some time attending with his customary regularity, Bellevue Hospital in that city, and very shortly left for

England where he spent all the time at his disposal in the hospital wards and at his studies. He successfully went up before the Royal College of Physicians of London and the Royal College of Surgeons of England, and obtained the licence of the one and the membership of the other. He then visited Paris and Berlin for a brief space, and as usual was found following the great masters of these capitals around the hospitals, never losing sight of his great aim—the increasing of his already large store of professional knowledge. Shortly after his return to Canada he was married (Jan., 1864) to Miss Isabella Campbell, of Yarmouth, Ont., whose premature decease in October, 1884, all but crushed his heart, and who was deservedly loved and respected by all who knew her.

Dr. Fulton settled in Fingal, Ont., for the practise of his profession, and had not been there long before he was tendered by the late Hon. Dr. Rolph and accepted the professorship in Anatomy, in the medical school of which he had so recently been a distinguished student. His duties as a professor were begun with enthusiasm, and as a medical teacher he was a success from the very first. Not content, as most men of his early age would have been, with the high position he had already reached, he attended University College classes in arts, with the intention of graduating in arts at the Provincial University. This intention, owing to constantly increasing duties, he had most reluctantly to abandon ; for he greatly disliked to give up any plan on which he had deliberately set his heart. In addition to his professional and professorial duties, in 1867 he began and shortly completed his work on Physiology, which was for years highly prized by successive classes of students, as giving a clear and succinct epitome of that subject in the briefest possible compass, and which he subsequently re-wrote and enlarged for a second edition. In 1869-70 he lectured on physiology and botany with the same acceptance as had characterized his lectures on anatomy.

In 1870 he busied himself, in addition to other duties, in writing a work on Materia Medica which, however, from stress of other labors, was never completed. This year he sent in his resignation of his chair in the college, owing to difficulties which had arisen, and in consequence of which Drs. Rolph, Geikie, and Fulton resigned together ; Dr. Fulton consented, however, on being requested to do so, to withdraw his letter of resignation. In August, 1870, he bought from its then proprietor the *Dominion Medical Journal*, which had been carried on for a short time, and into which Dr. Fulton at once infused life and vigor. He changed its name to the CANADA LANCET, under which title it appeared for the first time in September, 1870, and under Dr. Fulton's indefatigable editorship has been continued ever since ; the LANCET having in that time risen from having hardly any influence and a very small circulation, to the position it now holds, of being the most influential and widely circulated medical journal in the Dominion of Canada ; a change effected by its proprietor's amazing and continuous industry, aided by his great business tact. In March, 1871, Dr. Fulton finally resigned his chair in Victoria College Medical School, and was offered and accepted the professorship of Physiology in Trinity Medical College. This he continued to hold, and to discharge its duties with distinguished ability and satisfaction to all concerned until a few years ago, when he succeeded his colleague, Dr. Bethune, on that gentleman retiring from the chair of Surgery. This chair, he filled ably and well till his death, and in connection with it, he was also one of the surgeons to the Toronto General Hospital, which institution has in his death sustained a severe loss.

As an editor of a medical journal, our readers do not need to be told that Dr. Fulton was earnest, painstaking, and thorough in a most unusual degree. The same, too, may be said of him as a medical teacher, and indeed in every other relation in life where he had duties to perform. He was for nearly twenty years before his death a member of Knox Church, Toronto, and one of the trustees of that church. Here, his advice and remarkable clear-headedness will be much missed. His memory will be long cherished, and his example it is to be hoped will be followed by not a few of our young medical men. For as Dr. Fulton made himself what he was, by his persevering efforts, for he was essentially a self-made man, they too, by doing and working as our departed confrère did, may come to occupy the highest positions in public and professional influence and respect.

TEN per cent. of the whole amount of alcohol manufactured in the U. S., is used for medicinal purposes.

UTERINE HEMOSTATICS.

Hemorrhage from the uterus is of such frequent occurrence, and so often of serious import, that means for its arrest have been sought for in all ages. Experiments with countless agents, having this object in view, have been made, from the earliest period of which we have any record, down to the present day. Many of these agents have been vaunted at various times as specifics, and physicians have exultingly exclaimed, Eureka! I have found it. But further experience failed to establish their alleged virtues, and when weighed in the balance by time, they were found wanting. The vegetable and mineral astringents long held undisputed sway, and up to a comparatively recent date occupied the first place as hemostatics, but like their antecedents, failed to maintain their position, and were justly superseded. They only held this position so long, because of our want of knowledge of something better, and not because of their innate and established virtue. Yet many learned and conscientious physicians placed implicit confidence in them in former days. We well remember our professor of obstetrics repeatedly asserting, that if deprived of acetate of lead, he would "abandon the practice of midwifery," yet, who at the present day places any reliance on that remedy in uterine hemorrhage? It is difficult to conceive how astringents could exert any valuable styptic power, when passed through the system. Only a possible infinitesimal portion in homeopathic dilution could get to the bleeding vessels. But doubtless it was thought by our fathers that they acted "dynamically." Their employment for so long a period, only proves the besetting tendency in medicine to self deception, even among the most cautious and conscientious. Nor can we boast of freedom or exemption in this respect, for doubtless many of our favorite remedial agents will be superseded in future, as medical knowledge progresses.

The inclination at present is to rely less on internal remedies, ergot alone excepted, and more on such agents as water, heat, and electricity. Contraction of the muscular fibres of the uterus and of blood vessels is the object to be attained, hence the agents which accomplish that most rapidly and effectually, are the ones indicated. Mechanical irritation of the uterus internally and externally, removal of foreign bodies, injections of hot water, which in addition to its mechanical action, produces specific effect, by heat, and the application of electricity, the most potent and rapid stimulant to muscular fibre known, are the agents now chiefly employed, and with much better results, than those produced by any former treatment. Styptic liquids injected into the uterus are sometimes employed with good effect, but the danger of setting up severe irritation, inflammation or some other morbid action, forbids their use except in extreme cases. Hot water applied by means of a rubber bag to the lumbar vertebræ, and injections into the vagina and even uterus, have been found more effectual in controlling profuse menstruation and uterine hemorrhage, and much less dangerous. The water should be as hot as can be borne, and should be continued until the hemorrhage abates or ceases.

The only internal remedy upon which reliance can be placed in acute cases, is ergot. This should be administered first, especially if the uterus be in an advanced state of development, either from pregnancy or from some pathological cause. But if it be of normal size, ergot is less effectual and cannot be relied on. Some few remedies, such as digitalis, etc., may be found useful to lessen the rapidity of the circulation, but they do not effect a cure. When hemorrhage results from dyscrasia, or some altered condition of the blood, and one attack renders the system more liable to a second, then iron, quinine, arsenic, etc., act slowly but effectually by improving the plasticity of the blood, and otherwise restoring it to a normal condition. Cannabis indica has been strongly recommended in hemorrhage caused by uterine fibroids, and in painful menorrhagia, but it is a very unreliable remedy. Opium and the alkaline bromides, from their sedative effects, may benefit some cases of menorrhagia but can hardly be classed among the uterine hemostatics. Hydrastis and hamamelis have recently been strongly endorsed for this purpose. It is claimed that they exert an undoubted beneficial effect on hemorrhages, passive congestions, and the pain which often accompanies these pathological conditions. Sufficient time has not elapsed to pronounce upon upon their merits. We can only hope that the virtues attributed to them may be established by more extended experience, and that they possess all that their advocates claim for them.

IODIDE OF POTASSIUM IN THE LATER LESIONS OF SYPHILIS.

The proper use of iodide of potassium in the later lesions of syphilis does not seem to be given the attention due it. This is particularly true of lesions of the nervous system. Our text-books do not seem to advocate the use of iodide of potassium in the quantities demanded in grave cases. Recent authority speaks of giving large doses, but does not urge the necessity for heroic doses in alarming cases. In cases where there are no alarming symptoms, twenty, thirty, or forty grains of the potassium iodide three times a day is ample. In these doses the symptoms can be watched and the doses increased in size to suit the endurance of the individual.

Syphilis of the nervous system, characterized by convulsions, hemiplegia, syphilitic hemispasms or coma, necessitates a quantity commensurate with the gravity of the cases; hence, in extremely unfavorable cases, from three hunderd to five hundred grains should be given every twenty-four hours till the alarming symptoms are relieved. The drugs should be largely diluted. While several authors recognize the necessity of prompt treatment and large doses, they do not express the facts as forcibly as is required. We draw this conclusion from our experience with cases of tertiary syphilis that were under the care of physicans and treated for months without any apparent benefit. The iodide of potassium was employed in what was supposed to be large doses—twenty or thirty grains three times a day—without showing results. As soon as the dose was increased to fifty or eighty grains three times a day the effect was soon noticeable. Iodism or gastro-intestinal irritation is apt to follow the use of large doses, provided the drug is taken on an empty stomach, but if taken on a full stomach, or well diluted, no evil effects are, as a rule, noticeable.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.—The following is the list of successful candidates at the College of Physicians and Surgeons of Ont. :—

Primary—Honors, H. W. Armstrong, J. H. C. F. Fisher, W. R. Wade. *Pass*—E. C. Arthur, R. K. Anderson, W. J. Armstrong, T. A. Amos, W. E. Almas, J. C. Auld, J. F. Brown, F. J. Bradd, J. Brown, P. Brown, J. J. Brood, F. J. Bateman, W. W. Birdsall, U. E. Bateson, J. E. Bowman, G. M. Bowman, T. F. Bibby, James Bell, W. J. Bradley, W. C. Barber, J. D. Balfour, E. R. Bishop, H. Becker, W. P. Chisholm, James Campbell, G. G. Caron, E. Clouse, J. A. Cross, J. T. Campbell, J. H. Collins, W. H. Clarke, J. Crawford, A. W. Campbell, J. C. Connell, R. M. Cooper, C. A. Cline, J. A. Creasor, W. P. Chamberlain, G. K. Crosthwaite, W. H. Clapp, H. Chapple, J. Carruthers, F. P. Cowan, W. H. Cooke, Jennie S. Carson, J. Duff, M. C. Dewar, G. A. Dickinson, W. A. Dixon, G. F. Dryden, C. F. Durand, Lelia A. Davis, W. J. Early, W. Egbert, A. R. Elliott, Elizabeth Embury, A. T. Emmerson, G. F. Emery, C. L. Easton, H. C. S. Elliott, E. Evans, A. E. Edgar, W. A. Fish, F. F. Ferguson, A. B. Foster, T. A. Fitzgerald, J. B. Fraser, T. A. Ferguson, F. E. Godfrey, W. C. Gilchrist, J. C C. Grasett, John Grant, J. A. Greenlaw, O. Groves, E. H. Greene, E. W. Gemmill, H. Grundy, A. J. Goold, W. H. Grooves, B. Hawke, W. E. Harding, R. G. Howell, A. H. Holliday, M. W. Hart, A. J. Harrington, J. S. Hart, J. M. Hotson, C. H. Hamilton, A. J. Hunter, F. B. Harkness, H. R. Hay, J. A. Howitt, W. Hall, E. H. Horsey, J. M. Henwood, S. Hutton, D. Henderson, T. H. Johnston, S. J. Jones, G. F. Jones, T. J. Jamieson, D. Jamieson, J. W. Johnson, H. W. Jeffs, W. Kerr, R. A. Kennedy, J. D. Kennedy, J. A. A. Kelly, I. J. Lane, F. Lawrence, Marion Livingstone, H. Mason, H. J. Meiklejohn, J. H. O. Marling, Albert Myers, D. Mitchell, G. Mark, C. N. Mallory, T. J. Moher, W. C. B. Murray, J. T. Manes, M. G. Millman, W. J. Moxwell, R. G. Montgomery, W. J. Milne, E. Meek, A. B. Macallum, H. A. Minchin, R. D. Moffatt, H. J. Mullin, B. Z. Milner, T. A. Moore, J. Mundell, P. J. McDonald, C. H. McLean, J. R. McCabe, T. J. McNally, J. Y. McLachlyn, H. A. McColl, C. J. McNamara, H. McEwen, A. M. McFaul, H. R. McCullough, J. McGillawee, E. McEwen, A. McKellar, T. L. McRitchie, T. P. McCullough, D. H. McIntosh, J. H. McFaul, sr., J. H. McFaul, jr., D. McKay, J. McBride, C. McLachlan, J. M. McFarlane, S. H. McCammon, A. L. McDonald, J. H. Nimmo, T. J. Norman, W. W. Nasmyth, J. P. Ogden, T. O'Neil, T. C. Patterson, D. H. Piper, J. A. Phillips, A. G. Patterson, R. H. Palmer, J. C. Patton, W. F. Pratt, T. A. Patrick, A. H. Perfect, J. F. Palling, L. T. Pare, W. R. G. Phair, H. D. Quarry, S. H. Quance, J. W. Ross, J. A. Ross, R. R. Ross, J. H. Reid, J. P. Roger, S. T. Rutherford, L. F. Ross, A. J. Reynolds, P. J. Rice, G. S. Rennie, D. A. Rose, J. B. Reid, R. P. Robinson, J. F. Rogers, A. W. Stinson, F. G. Salter, W. J. Stevenson, W. H. Smith, Geo. H. Shaver, D. J. Sinclair, F. N. G. Starr, G. Stewart, A. A. Smith, W. D. Scott, O. Sisley, E. Sisley, D. M. Smellie, W. A. Smith, W. A. Sangster, G. Silverthorne.

T. L. Stringer, Gustave G. Smith, Adam Thomson, F. G. Thompson, H. B. Thomson, H. A. Turner, P. W. Thompson, S. H. Thorne, J. Tyrrell, R. E. Walker, J. S. Wardlaw, J. J. Wiley, R. J. Wade, A. E. Wills, G. R. Watson, J. Webster. H. Wallwin, H. W. Westlake, A. J. Wilson, G. A. Whiteman, F. A. Wygle, A. F. Warner, M. Wilson, W. A. Whitney, W. M. Wright, L. Watson, S. R. Walker, T. S. Webster, H. W. Wilson, H. P. Wilkins, S. N. Young, H. A. Yeomans.

Final—T. A. Amos, Geo. Acheson, J. Appelbe, W. Armstrong, O. R. Avison, A. G. Allen, J. V. Anglin, James Bell, J. D. Balfour, J. J. Brown, A. D. Barnett, S. G. T. Barton, A. Bradford, J. W. Begg, G. G. Caron, E. Clouse, A. W. Campbell, W. H. Clarke, C. R. Charters, A. E Collins, D. Cameron, J. M Cameron, E. Campbell, G. F. Dryden, C. F. Durand, D. A. Dobie, C. L. Easton, Ed. Evans, J. H. Eastwood, A. J. Errett, W. A. Fish, A. B. Foster, A. E. Freeman, E. J. Free, Ada A. Funnell, J. M. Fraser, A. D. Graham, Jas. Gallaway, J. Guinane, H. P. H. Galloway, W. R. Gillespie, W. J. Glassford, M. J. Glass, W. F. Graham, M. Gallagher, S. Hawke, M. W. Hart, H. R. Hay, Wm. Hall, J. H. Hoover, R. R. Hopkins, T. H. Halsted, S. J. Jones, G. F. Jones, J. W. Johnson, D. Johnson, M. James, R. A. Kennedy, J. A. A. Kelly, M. J. Keane, F. Lawrence, Marion Livingston, H. Lawson, A. E. Lackner, W. F. Loucks, T. A. Moore, J. Mundell, D. Mitchell, M. Mullock, J. A. Macmahon, C. F. Moore, M. Maybee, J. E. Mabee, C. H. McLean, A. M. McFaul, H. R. McCullough, E. McEwen, A. L. McDonald, D. P. McPhail, J. H. McCasey, T. McKenzie, C. D. McDonald, James McLurg, J. H. Nenimo, T. J. Norman, W. Newell, O. G. Niemeier, A. Ochs, D. H. Piper, A. H. Perfect, L. T. Pare, T. S. Philp, J. A. Palmer, A. F. Pirie, A. R. Pyne, S. H. Quance, James Rea, G. C. Richardson, J. W. Ross, R. R. Ross, L. F. Ross, D. L. Ross, J. B. Reid, W. J. Stevenson, George H. Shaver, G. Stewart, W. D. Scott, Gustave G. Smith, C. R. Staples, J. W. Shellington, W. O. Stewart, W. R. Shaw, J. C. Smith, D. Sinclair, W. A. Shannon. J. R. Shannon, A. J. Stevenson, R. S. Smith, Thomas Scales, Adam Thomson, S. H. Thorne, M. Tovell, J. M. Thompson, J. D. Thorburn, A. F. Warner, W. R. Walters, W. J. Walsh, A. E. Yelland.

Ontario Medical Association.—In addition to the papers mentioned in our last two issues, the following have notified the Secretary, Dr. J. E. White, of their intention to be present, at the meeting to be held in Toronto, next Wednesday and Thursday, and give papers on the following subjects:—Dr. G. H. Fox, New York, "on the chirurgical treatment of lupus vulgaris, pustular acne and hypertrichosim"; Dr. Groves, Fergus, "Prostatotomy"; Dr. Holmes, Chatham, "Puerperal Fever"; Dr. Adam Wright, Toronto, "Removal of Uterine Appendages"; Dr. Turver, Parkdale, "Reduction of temperature in acute diseases of air passages"; Dr. J. E. Graham, Toronto, "Case of Herpes Zoster, with pathological notes"; Discussion in Ophthalmology, opened by Dr. Rosebrugh, Toronto, "Some practical points in the treatment of diseases of the Eye"; Discussion in Surgery, opened by Dr. Strange, Toronto, "Points in the Minor Surgery of the general practitioner"; Dr. Macdonagh, Toronto, "Primary tuberculosis of the larynx"; Dr. Ferguson, Toronto, "Arsenical neuritis"; Dr. Murray, Thorndale, "Case of laceration of femoral artery"; Dr. W. H. B. Aikins, "Micro-organisms of puerperal fever"; Dr Fenwick, Kingston, "Laceration of cervix uteri"; Discussion, Dr. Henderson's notice of motion for the formation of Medical Defence Union, for the purpose of defending or assisting members in cases of alleged malpractice, where unjust or groundless charges are brought against them. We look forward to an exceptionally interesting meeting, both as regards the subjects to be discussed, and the gentlemen taking part in them. A number of papers are expected, which have not been received at the time of going to press.

Administration of Oxygen in Croup.—Dr. Wagner, of Indiana, writes to the *Br. Med. Jour.*, suggesting the direct administration of oxygen as a substitute for tracheotomy or intubation in membranous croup. He mentions three successful cases, and reasons, that as the object of tracheotomy or intubation is to supply oxygen to the blood, this may be done as above suggested. He says the relief afforded is perhaps more rapid than by tracheotomy, and, he adds, the practice should have the following advantages: "The membrane cannot extend below the incision, and thus render the operation useless; it does not cause broncho-pneumonia, as intubation sometimes does; and all physicians are not prepared to tracheotomise or intubate, while anyone can generate oxygen and apply it. Also, oxygen seems to lend more strength to cast off the membrane, and the trachea is not encumbered by a tube or false outlet for expelling air from the lungs."

ON THE DIAGNOSIS OF LOCOMOTOR ATAXY.—Dr. Jonathan Huchinison in an able lecture, (*Med. Press. & Cir.*) on the "Surgeon's share in Locomotor Ataxy," after combating the prevailing doctrine that ataxy is simply a schlerosis of the posterior columns of the spinal cord, gives the following symptoms as aids to diagnosis. Let me, he says, disturb your faith in the cardinal symptom, that the patient is unable to steady himself when his eyes are shut, for though it is a critical symptom, it is by no means present in all cases, and is only one amongst a very large group of very interesting defects and failures in nerve function, which go to make up this exceedingly interesting and variable disease. A very useful question to put to a patient is, as to whether he can stand over the wash-hand basin without assistance during his ablutions, that is, without using his left hand to steady himself, if he can then he is not ataxic, or but slightly so. Next you have to investigate the Argyle Robertson phenomena, which is simply this, that the patient has a pupil which is small and incapable, or almost incapable, of dilatation, when the impulse of light on the retina is withdrawn, so that at first you might be tempted to record the fact that the patient had motionless pupils; they are simply in a condition they ought to be, when exposed to a full light. But if you try him at accommodation, and tell him suddenly to look at some small object and then at the sky, it will be found that when he converges his eyes on some close object, then his pupils manifest the power of contracting a little more, and when he looks at a distant object, his pupils will become a little, a trifle larger again, still the power of dilatation is very defective. Then, next in order, are the peculiar pains in the limbs, generally described as gnawing or rheumatic pains. Patients not infrequently come under the care of the surgeon, when these pains occur about the bladder and rectum, with the so-called "pelvic ache." To sum up the chief diagnostic symptoms, we have *ophthalmoplegia, internum* or *externum*, the *gastric crises, retention of urine*, and *disturbance of the powers of defæcation*, then *ulcus pedis perforans, amaurosis, Charcot's joints, pelvic aches*, and lastly *herpes*. Ophthalmoplegia internum is due to paralysis of the nerves governing the intrinsic muscles of the eye, seen in the Argyle Robertson phenomenon. Ophthalmoplegia externum is due to defective action of the oblique and recti muscles. When bladder troubles are present, the patient may allow his bladder to fill even above the umbilecus, yet he makes no complaint as under similar circumstances a patient with stricture would do. The ulcus pedis perforans has these peculiarities, that the part is first numb, then a corn forms which ulcerates and gets deeper, and it is notable that while a healthy person would be unable to stand upon the inflamed or ulcerated corn, the ataxic patient goes on standing on the ulcer till it proceeds to an unusual depth. The presence of herpes along the course of particular nerves with a tendency to become symmetrical, difficult to cure and frequently returning should create suspicion.

FATAL TEMPERATURES FOR BACILLI.—The following temperatures are given by Dr. Sternberg (*Med. Times*), as being the degrees of heat necessary to kill some of the more important of these organisms:

Typhoid bacillus	132.8°
Cholera bacillus of Koch	125.6°
Anthrax bacillus	129.2°
Tubercle bacillus	212°
Pneumococcus	136.4
Staphylococcus p. aureus	136.4
Streptococcus of erysipelas	129.2°
Micrococcus Pasteurii	140°

PERMANENT FEHLING'S SOLUTION.—Dr. McCulloch (*Brit. Med. Jour.*) gives the following as plain directions for the above fluid. Sol. A.:

℞—Cupri sulph. (cryst.), . . grs. 181
Aquæ, ... ad. ℥ vj.—M.

Sol. B.:

℞—Rochelle salt, ... grs. 728
Caustic soda, ... grs. 400
Aquæ, ... ad. ℥ vj.—M.

When Fehling's solution is required, mix equal volumes of sols. A. and B.

POMADE FOR CUTANEOUS DISORDERS DURING PREGNANCY.—Monin, in *L'Union Médicale*, gives the following formula:

℞—Zinc. oxid. pulv., ... grs. iij.
Hydrarg. ammoniat., . . . grs. jss.
Ol. theobromi,
Ol. ricini, ... āā ʒ ijss.
Ol. rosæ, ... gtt. x.—M.

SIG.—Apply to the face morning and night.

Infantile Constipation.—The following is said to be a very successful remedy in the above:

℞—Podoph. resin, ... grs. viij.
Iridin, ... grs. v.
Sp. amm. aromat., ... ℥ j.
Digest for several days and filter.

Sig.—One or two drops at bedtime, on a piece of loaf-sugar, for a child of one year or under.

Gastralgia.—The following is recommended *(Med. Summary)*:

℞—Tinct. stramonii, ... ℥ ss.
Tinct. hydrastis, ... ℥ iv.
Aquæ, lauro-cerasi, ... ℥ ijss.—M.
Sig.—℥ j, in water, every 4 hours.

Remedy for Neuralgia. It is stated (*Med. Press*) that equal parts of eau de Cologne, ether and chloroform form a mixture which gives instantaneous relief in neuralgia. A few drops poured on a handkerchief, previously moistened with water and applied to the painful part, gives instantaneous relief. It is also very useful in nervous headache. The burning sensation which is first felt quickly disappears.

New Deodorants.—Dr. Leale presented, at a late meeting of the N. Y. County Med. Asso. a number of samples of new antiseptics and disinfectants with which he had been experimenting in his own practice. Among them was first, a substance called glycozone, consisting of pure glycerine with four volumes of ozone. It is an entirely odorless fluid, and effectually destroys all bad odors, and was thus suggested as a useful application for cases of offensive cancer. Another was a solution of peroxide of hydrogen, which is intended to take the place of Labarraque's solution of chloride of lime, which is highly offensive to some individuals. It should be used, diluted with water ten parts to one. It is also odorless and colorless.

International Congress on Inebriety.—The Council of the English Society for the Study and Cure of Inebriety, have completed arrangements for an International Medical Congress, to be held at Westminster Hall, London, July 5th and 6th, 1887.

The object of this Congress is to present and discuss the problems of inebriety medically, from a purely scientific standpoint, by the best authorities. Papers and addresses are promised from a large number of the most distinguished physicians, both at home and abroad.

Whooping Cough.—A Norwegian physician claims that pertussis may be readily cured, even in one night, by causing the patient to sleep in a room in which sulphur has been burned.

For Venereal Warts.—Equal parts of tannin and burnt alum is said *(Can. Med. Rec.)* to dessicate venereal warts, so that they can be rubbed off in a few days.

British Diplomas.—The following Canadians have passed the late M.R.C.S., Eng., Examination—J. McLurg, (Trin.), A. F. McVety, (Queen's), and N. M. Parry.

Personal.—Dr. A. R. Andrews, of Aylesford, N.S., has been appointed Government Medical Officer of Turks' Island, West Indies.

Wm. Ianson, Toronto, and Arch. Jamieson of Kingston, have obtained the L.S.A., Lond.

Chlorate of Potassium in Epithelioma.—Reclus reports (*Gaz. des hóp.*) a number of cases cured in a few weeks, by keeping the part constantly covered with compresses wet with a saturated solution of the above drug.

Dr. A. D. Rockwell, says:—"Kidder's Induction coils are unique in construction and of unsurpassed efficiency in the treatment of those morbid conditions for which the Faradic current is indicated. The varying qualities of current proceeding from these coils, possess a differential value of no little importance, and are worthy a more careful investigation by those interested in electrotherapy than has yet been given them."

It is said that gonorrhœal ophthalmia does not always depend upon inoculation, but that it is an independent manifestation of the disease just as is the arthritis.

M. Doyden (*Br. Med. Jour.*) recommends the following in inflamed eczema and ulcerated impetigo; Salicylic acid, 2 grs.; lanolin, 50 grs.; zinc oxide, 24 grs.; starch, 24 grs.

Books and Pamphlets.

THE YEAR-BOOK OF TREATMENT FOR 1886. Philadelphia: Lea Bros. & Co. $1.

This work consists of a critical review for practitioners of medicine and surgery, by eminent authors at home and abroad. Each department has been fully and concisely treated, and care has been taken to include only such clinical and pathological work as bears directly upon treatment. A full reference is given to every article noticed.

A COMPEND OF ELECTRICITY AND ITS MEDICAL AND SURGICAL USES. By Charles J. Mason, M.D., Assistant Surgeon U. S. Army. Philadelphia: Blakiston, Son & Co. 1887.

This little work presents a selection and classification of such facts and principles as will give a clear and short, but sufficiently comprehensive view of this now important branch of therapeutics. Certainly the average physician does not use this agent as often as the success attending its application would warrant, and we can heartily recommend the book to such practitioners as have not time to peruse more exhaustive treatises. To the student it will be of great value, as the definitions used are clearly put, a great desideratum for those whose time for the study of this branch is limited.

DRUG ERUPTIONS. A Clinical Study of the Irritant Effects of Drugs upon the Skin. By Prince A. Morrow, A.M., M.D., Clinical Professor of Venereal Diseases, Bellevue Hospital Medical College. New York: W. Wood & Co. $1.75.

It is an axiom, that the prescriber should know all the effects that may be produced by any drug he orders, even the remote and unusual effects. While this is true, we doubt if most physicians have given much attention to such abnormal manifestations as the eruptions produced by the various agents used in the cure of disease. This subject of drug eruptions is of special interest, as they sometimes simulate very closely the exanthemata and other affections of the skin. Considerable attention has been devoted to this subject of late, and the work in hand seems to be an epitome of the views of observers in all countries. The amount of patience exercised by the author in selecting from the numerous sources of information, is wonderful. To this he has added the results of his personal observations, and has made a most useful and readable book. He omits the action of the less frequently used drugs, and confines himself in the main to those which, from their every-day utility, are of practical importance to the ordinary physician in his daily work. We heartily recommend the work to all those desiring the latest information on this subject.

A PRACTICAL TREATISE ON OBSTETRICS. Vols. I., II. and III. (4 vols.). By A. Charpentier, M.D., Paris. Illustrated with lithographic plates and wood engravings. These are also Vols. I., II. and III. of the "*Clycopedia of Obstetrics and Gynecology*" (12 vols.), issued monthly during 1887. New York: W. Wood & Co.

> "Sometimes swiftly, sometimes slow,
> Wave succeeding wave they go
> A various journey to the deep,
> Like human life to endless sleep!"

How many treatises on obstetrics have floated down the stream of time within the last half century? How many students of the present day know, even by name, such writers as Burns, Gooch, Badeloque, Dewees, Meigs, Ramsbotham, Rigby, Magnier, or Churchill? And yet these men were great in their generation, and did good work. But, "wave succeeding wave," they have gone, if not to "endless sleep," certainly to undisturbed repose. It is a sad fact, too, that as the stream progresses, the current becomes swifter, and its floatage more voluminous. Old age used to creep slowly over books; they now wilt and wither almost before reaching adolescence. Of all the assets a departing or an insolvent physician can bequeath to his heirs, or assign to his creditors, the very worst, even worse than his old clothes, are his old books—that is to say, all over two years old.

Messrs. Wood & Co. have launched upon the impetuous stream, in English form, a work of formidable dimensions, the production of the eminent Frenchman, Dr. A. Charpentier. We gratefully acknowledge receipt of the first three volumes, from a cursory perusal of which we have been led to hope that the enterprising publishers will have no reason to regret their spirited adventure. We cannot, however, refrain from suggesting to the Messrs. Wood, in the way of friendly advice, that they should in future look more closely after the execution of their plates, especially the reference letterings. An able anatomist may not be inconvenienced by this sort of defects, but they must prove formidable stumbling blocks to junior students.

Births, Marriages and Deaths.

On 15th April, at Toronto, John Fulton, M.D., Editor CANADA LANCET, aged 50 years.

THE CANADA LANCET.

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Original Communications.

PHOSPHATURIA.

BY H. ARNOTT, M.D., LONDON, ONT.,

The urine is justly regarded as the most important excretion of the body, from a clinical standpoint. Its constitution varies with every change of diet, habit or health. This very sensitiveness, whilst it gives us the reasonable hope that, at least, every serious disease would be accompanied by a corresponding change in the constitution of this excretion, at the same time warns us that we must be very cautious in our deductions, lest we ascribe to disease a change that has been caused by exercise or diet. But if our knowledge were sufficiently thorough, we should be able to tell the difference, and to read disordered function, by the character of this excretion almost as accurately as we do a book. I believe that our knowledge of the urine is only in its infancy, and that at no distant day its importance in diagnosis will be much greater than at present. A wide field lies before the diligent student, the cultivation of which will yield him abundant satisfaction. Personally, I am willing to declare, that I have received more light in the understanding of obscure cases from even my imperfect knowledge of this subject, than from the study of any other single physiological system.

In making a diagnosis we pay attention to the urates, because ready to the eye in cold urine; to the amount of urea, because readily estimated by the urinometer and even by the eye, but the variation in the amount of phosphates is frequently neglected, probably because being largely held in solution they must be precipitated. Phosphoric acid is found in every tissue and fluid of the body, in combination with a base and excreted in the urine, the amount varying greatly in certain pathological conditions. It is to the diagnostic importance of this variation that I wish to draw attention. I am aware that Prof. Vogel, after making a thousand observations, has declared that he can draw no inference of any clinical value, so I shall endeavor to avoid the quicksands of doubt and keep to a few points that seem to me to be solid and useful ground in differential diagnosis. Anything that will remove doubt and render diagnosis more certain, is of the utmost importance, and I hope that a discussion of this subject will prove interesting and, perhaps, useful. Every one has been puzzled over symptoms that may mean a great deal or nothing at all. In such cases any definite symptom that would set the physician's mind at rest, even as to the reality of some of the symptoms complained of, would be very acceptable. If we discover oxalate of lime crystals in the urine of a patient suffering from a number of subjective symptoms, it is satisfactory, so far as it forms a basis of certainty, from which to reason. We call the trouble oxaluria, for want of a better name, but it does not follow that we regard the crystals in the urine as anything more than the most definite of a number of uncertain and unsatisfactory symptoms.

Prout, Golding, Bird, and others drew attention to the deposit of phosphates in the urine as a valuable symptom, and even styled the disturbance giving rise to it, phosphaturia, and expressed their belief in a phosphatic diathesis, but later investigations have dispelled the belief in any such constitutional tendency. I do not think that these acute observers understood the phenomenon to constitute the disease any more than we mean by the term glycosuria, to convey the idea that the passage of sugar in the urine constitutes the disease. They doubtless looked upon it as the most constant and definite of a number of symptoms presented by some constitutional disturbance not thoroughly understood. But they overlook the important fact, that a sample which is muddy from phosphatic sediment may contain very much less of these salts than one that is perfectly clear. Indeed the probability is that the muddy sample will have a deficiency of phosphates, as we shall see hereafter. Different views have been held on this

(Read before the Ont. Med. Association, June, 1887.

subject according to the point of view from which it has been studied. Thus, some have studied the phosphates only as they appear as a sediment in the urine, others have separated the earthy and alkaline phosphates, but have neglected the total amount, whilst others have, very properly, I think, considered the total amount of phosphate excreted to be the only proper basis for a practical study of the subject. According to this last view, phosphaturia means any deviation from the normal amount excreted, whether increased or diminished. As might be expected, the views put forth by various authors differ as much as their methods of studying it. Some declare it to be merely a symptom of disorder of the stomach or liver, others believe it to be only a question of reaction, etc.

In order to prove that I am not drawing on my imagination, I shall trouble you with a few short quotations from prominent authors. Prout: "nervous irritability the cause of increased excretion of phosphates;" Bence Jones: "merely depressed acidity;" Dickenson: "exaggerated mobility the cause of an excess of phosphate;" Dana: does "not find excess in nervous irritation;" DaCosta: "in spite of the distinct sediment of phosphates it is doubtful if the latter are in excess;" Beale says: "there is not really an excess, but the urine being alkaline, the earthy phosphate is thrown down."

I need not trouble you with any more quotations. I have given enough to show the indifferent manner in which the subject has been studied. In my opinion, the important thing is to ascertain the amount of phosphoric acid excreted, but as this would be somewhat troublesome, we adopt the simpler method of estimating the amount of phosphate. The base with which the acid is excreted is largely dependent on the diet, if that be full the tribasic compounds are common, and the urine is neutral or alkaline, but if the diet be low the reaction becomes acid from preponderance of monobasic compounds and no phosphate is precipitated although there may be more present. Hence, precipitation is rather an evidence of deficiency than excess of phosphates. Indeed, it must always mean either an excess of base, or a deficiency of acid.

A similar change may be brought about by the administration of alkalies. A patient whose urine does not present any precipitation of phosphates is given alkalies, and in a short time it becomes muddy and deposits a crust of phosphate on the vessel. Now I am satisfied that increased alkalinity may be the result of true dyspepsia, or even of some peculiar diet, but an increase or deficiency of phosphoric acid to any notable degree and for any length of time, must have an entirely different cause. When dyspepsia occurs under such circumstances, it will always be found to be due to some nervous disturbance. This is an important and definite statement, and if I am wrong I would be glad to be shown my error. If it be true, then it must be important to ascertain whether the amount of phosphoric acid is increased or diminished in all such cases. On examining a sample muddy with precipitated phosphates, if I find the amount of phosphoric acid increased, I order more rest to the nervous system; if on the other hand, I find that the amount of phosphoric acid is normal, I request for a time a change or reduction of diet. In the latter case there is an increase of base due probably to diet; in the former an increase of acid due to nervous exhaustion.

The phosphates appear in the urine in three principal forms; the triple phosphate, earthy phosphate, and crystalline calcium phosphate; each of which, if continued for any length of time, has a certain amount of clinical significance. The triple phosphate is found in cystitis, in states of decomposition of the urine, and in some disorders of digestion, and along with other symptoms is valuable in deciding a doubtful diagnosis. The earthy phosphate, when largely deposited, generally indicates a neutral or alkaline condition of urine, which, if pathological and continued for a length of time, is an indication of a grave constitutional disturbance. The crystalline phosphate of lime is, according to my observations, found mostly in chronic diseases of the brain. If a doubtful diagnosis lay between some functional disturbance and an obscure disease of the brain, the discovery of this salt in the urine would decide me in favor of the latter. On more than one occasion I have seen this symptom determine the diagnosis, and correctly so, as the future histories showed. In only one case have I seen it absent where I felt sure there was organic disease of the brain.

But as before stated, the most important point

is to find out the amount of phosphoric acid excreted, and this is approximately arrived at by precipitating the total amount of phosphates present and estimating the relative amount. This need occupy only a few seconds, and I believe it will soon constitute one of the common tests in every examination of the urine. Dr. Dana, of York, whose article in the *New York Medical Record* will well repay perusal, uses long tubes about half an inch in diameter and thirty inches in length. The tube is filled three parts with the sample to be examined, and the balance of the tube filled with a mixture composed of magnesia sulph. and ammonium chloride of each one part, liquor ammonia one part, and distilled water eight parts. This causes a precipitation of ammonia-magnesium phosphate, which in about twenty-four hours has settled firmly to the bottom, and the depth of the sediment shows the proportion which it bears to the normal.

With whatever form of test-tube used, a number of experiments with the urine of persons in good health, will soon determine the average depth, and any marked deviation therefrom will indicate the relative amount being excreted. Of course several analyses will be necessary before any conclusion can be arrived at. This may seem rather a crude test, but careful quantitative analyses show that it is sufficiently accurate for all practical purposes.

The simple test is of the utmost importance in many doubtful diagnoses, but unfortunately it has not been uniformly studied from this aspect. Many observers have studied the earthy and alkaline salts separately, whilst others have only taken note of them when precipitated as a sediment. As I intimated before, my observations lead me to the conclusion that whether the acid is excreted in combination with an earthy or alkaline base, depends generally on diet or digestion, and is possessed of comparatively little clinical value. But the total amount of phosphate giving an approximation of the amount of phosphoric acid excreted is an event of much greater importance, as observation has shown that whilst the amount of base is regulated chiefly by the diet, that of phosphoric and uric acids varies only with constitutional conditions. Notwithstanding the different methods of studying the subject, there are many useful points on which prominent writers are agreed. For instance, Roberts, Tyson, Wolff, Belfield, and Hoffman and Ultzman agree that the total amount of phosphates are increased in acute diseases of the nerve centres and diminished in the chronic stage of the same, with the exception of epilepsy. There is also a pretty general agreement that they are increased during, and for some time after, nervous strain. Dr. Beemer, Assistant Superintendent of the London Asylum for the Insane, who has written an able monograph on brain exhaustion, expresses the same view. I am inclined to believe that when the condition becomes sufficiently serious to justify the term "brain exhaustion," rather than nervous excitement, the phosphates will be found diminished to a marked degree, and reason tottering on her throne.

It is also becoming a recognized fact in the diagnosis of chronic renal diseases that the phosphates are diminished. Purdy, in his valuable work on Bright's disease, places it as one of the symptoms in his table of differential diagnosis. But, while we have these few points apparently established, there are a great many others on which the authorities totally disagree. Thus, Hoffman and Ultzman find an increase in febrile affections, whilst Wolff says they are diminished, but increased during convalescence. Many authors consider that an increase of phosphates is only an indication of dyspepsia, but Hoffman and Ultzman find them diminished in "severe disorders of digestion." Hoffman and Ultzman find an increase in bone disease; Belfield says you would expect it to be so; but, in fact they are diminished. And so there seems to be a disagreement with regard to many other diseases which, doubtless, in time by the accumulation of clinical evidence, will be removed.

In two cases I found the phosphates notably diminished in the late stage of chronic diabetes mellitus. In one of these there was not for several weeks during which the case was under observation, the slightest trace of phosphate to be found in the urine by the most careful tests. Being anxious to know what became of all the phosphoric acid, I had the fæces of this patient cremated and the ash submitted to a careful analysis by a competent chemist. I expected to find an increase in the fæces when there was none in the urine, but the result of my few experiments would seem to show that such is not the case, and that when not

excreted in the urine it must be retained. May not the retention of so much acid in the system be one of the factors in the production of diabetic coma?

An excess or deficiency of phosphates has been most useful to me in the diagnosis of a class of functional nervous disorders where there is no positive symptom. In many such cases where the symptoms related by the patient may be fancied or real, they will often be found useful in deciding the doubt and directing the thoughts to the cause of the trouble.

Many of these cases will be found to be real sufferers from an over-excited condition of the nervous system, due generally to some long-continued drain, and is found among youths as well as adults. There are three principal classes of patients affected in this way.

In the first there is hyperæsthesia and paræsthesia of the nervous system generally. The patient is sleepless, and a peculiar restlessness torments his waking hours; the eyeballs are sensitive to light and tender to the touch; a ring at the door-bell goes through the patient like a painful shock of electricity; the most delicate food causes pain in the stomach; there is frequent scalding micturition, simulating cystitis; and sometimes shooting-pains and numbness of the extremities cause fears of organic nervous disease.

In another class of cases backache and melancholia are the prominent symptoms. In men, the elastic term lumbago often does duty as a diagnosis, whilst in the female the very same symptoms direct our attention to that veritable scape-goat of all obscure symptoms—the uterus.

In some of these cases the pain may be the cry of the lumbar nerves for more healthy blood, but I believe that in the large majority it is caused by the deposit of phosphatic or oxalic crystals in the pelvis or tubules of the kidney. In such cases I have sometimes found casts, doubtless formed by the inflamed condition of the tubules caused by these crystals. A short course of some saline diuretic, with free diaphoresis and restricted diet, generally gives prompt relief. There are many persons who are frequently affected with pain in the back caused in this way. If the cause is understood the treatment will be more satisfactory. It is frequently regarded as rheumatic, but a careful analysis will generally show the very opposite condition of urine to what is found in rheumatism.

A third class of cases complain chiefly of dyspepsia and weakness. There is intense irritability of stomach, the most delicate food causes intense pain of a burning character, and sometimes vomiting is so persistent as to cause fears of organic disease. In such cases anæmia is a prominent feature.

In order to satisfy myself of the truth of these views, I have endeavored to study the natural history of such cases unmodified by medicine and without any treatment whatever but the removal of what I conceived to be the cause. In this manner, administering only a little colored water as a placebo, I have treated a number of severe cases of dyspepsia, anæmia, melancholia, etc., with the most satisfactory results,—and that, in some cases, after the ordinary medicinal treatment had failed. I do not wish to be understood as applying this treatment to any cases but those that are caused by some disturbance of the nervous system. In such medicine will often fail without the needed rest.

I am convinced from my, so far, imperfect study of this subject, that the cause of any marked and continued increase in the amount of phosphates excreted is always due to some irritation of the nervous system, whether in the form of injury, disease, or over-excitement. When examining the urine of students passing their examinations, I have invariably found that the anxious, excitable student was distinguished from his cooler companion by a greater excretion of phosphates. But exalted function must always be followed by depression, and an excess of phosphates at one time will bring a diminution at another.

When giving expression to these views I have been asked why we never used to hear of nervous exhaustion. The answer is two-fold. In the first place disorders that were formerly called "liver complaint," "dyspepsia," etc., are now recognized as merely the symptoms of "exaggerated nervous mobility," and treated accordingly. Again, the nervous strain of this age is immense when compared to that of even a generation ago. More rapid intercommunication, an increased consumption of tea, coffee, alcohol and other stimulants, a greater possibility giving rise to an increased desire for wealth, diminished rest to the nervous system through the improvement and cheapening of artificial light, the more general diffusion of literature

and a system of education which exhausts the vital powers of youth before they attain maturity, are only a few of the ways in which the nervous system is more heavily taxed than ever before in the history of the world.

I have nothing new to suggest regarding treatment. If the theory be true, as I believe, that an excess of phosphate is caused by some irritation of the nervous system, it follows that our principal reliance must be on rest. Whether the complaint take the form of dyspepsia, weakness, anæmia, paræsthesia, insomnia, or anything else, this must constitute the foundation of rational treatment. And this principle requires first to be applied to the digestive system. Many of these cases pit slightly on pressure all over the body, due to the deposit in the tubules of phosphatic crystals. A lowering of the diet increases the acidity of the urine, the tubules are cleared out, and, with or without the aid of a saline diuretic, the œdema is removed. In cases due to insolation or injury, counter-irritants are often singularly useful, to the base of the brain or along the spine as may be indicated.

There is no specific for these cases. Nitric acid and strychnia, as recommended by Golding Bird, are useful only so far as they improve nutrition. No amount of acid administered seems to have any appreciable effect in increasing the acidity of the urine, but this is soon effected by reducing the diet. This is an important point, for the more perfect the solution of the phosphates, the less likely they are to cause irritation of the kidney and the consequent œdema. I am fond of prescribing potass. bitartrate, in cases presenting any œdema, for the removal of this is necessary to an improved state of nutrition. Bromide of potass. is sometimes necessary to enable a patient to get sufficient rest; bismuth acts as a nervine tonic through its influence on digestion. Iron and quinine are useful after the nervous agitation has been soothed, and the condition of digestion improved.

I strongly object to the indiscriminate use of a tonic and stimulating line of treatment of such cases. Under such a course the patient gets relief and is very well satisfied; but he does not know at what a fearful cost to the reserve forces of his system the respite has been purchased. Such treatment represents just so many drafts on his latent vital forces. No additional force has been put into the body—only measures which call out its reserves have been used, and the time soon arrives when such drafts are dishonoured, the system fails to respond to such demands, and the patient becomes a hopeless nervous wreck. The onward march of rational medicine demands that such a ruinous policy be abandoned for the more enlightened course of husbanding our reserves.

DISCUSSION ON SURGERY.*

BY F. W. STRANGE, M.D., TORONTO.

When I received the honor of an invitation to open the discussion on Surgery at the present meeting of our Association, I was, at the threshold of my attempt, embarrassed with the extent and richness of the wide field from which I had been requested, by our esteemed President, to glean a few ears of surgical grain for mutual discussion. Reflecting on the objects and scope for which we are gathered together, and remembering that our membership is composed, for the most part, of gentlemen busied in the arduous and noble lives of general practitioners, I considered that it would not be amiss to abandon the customary plan of submitting for discussion a thesis on a subject which, while of important interest to all surgeons, falls more especially within the province of an hospital surgeon, and substituting therefor some topic with which we are all familiar, and with which we all have more or less constantly to deal.

I have, therefore, ventured to introduce a group of subjects which have certain kinship, and to ask the gentlemen around me to contribute their views and experience on the treatment of

I, Whitlow; excluding from this term, paronychia and superficial abscess of the fingers.

II. Phlegmonous erysipelas.

III. Carbuncles.

And first as to Whitlow. We are all acquainted with it, but woe to the surgeon who allows his familiarity to lead to contempt. I think I am safely within the mark when I say that I honestly believe I have seen as many permanently damaged and deformed fingers, resulting from whitlows neglected or badly treated, as I have from direct injuries from accidents. A man enters my surgery with the end of one of his fingers hard, red,

*Read before the Ont. Med. Association, June, 1887.

swollen, and exquisitely painful. The slightest pressure will intensely aggravate the pain. He tells me he has run a splinter of wood, or possibly a rusty tin-tack, into the part, or has injured the finger by a crush or bruise. Occasionally no exciting cause has been noticed. I summon my pathological knowledge to my aid, and I see that there is an intense inflammatory process going on in the pulp of the finger, commencing in the dense cellulo-fibrous tissue in which the ungual phalanx is embedded, and causing more or less irritation and inflammation of the lymphatics of the arm. But if the case be a more extended and severe one, and I shall probably find that the inflammation extends to the sheaths of the tendons, that the whole finger participates in the process, that the back of the hand has become puffy, red, and swollen, presenting the ordinary characters of erysipelas, and that the palm of the hand has swollen and become white owing to the thickness of the cuticle and its close connection with the fascia. Having satisfied my mind as to the pathology of the case, the next thing to consider is what shall I do for my patient, how shall I treat him? Many are the vaunted abortive remedies. Plunging the finger into very hot lye, human or otherwise, is a favorite panacea to the lay mind, so also is an abominable plaster of soap and sugar, which to my mind only adds to the mischief by increasing the tension of the part. I have known them tried often, with no success. Painting the part with nitrate of silver or tincture of iodine has been extolled, but in my hands has utterly failed. In fact, in my experience, all the highly extolled abortive remedies have indeed proved abortive remedies and nothing else. Some practitioners are content with ordering hot poultice after hot poultice, as the only topical remedy, with a view of bringing the whitlow to a head. I regard this expectant method as one fraught with the greatest danger to the vitality of the part. By its means no doubt suppuration is hastened, but, alas, instead of coming to the surface, to a head as it is called, the pus has a much greater tendency to burrow along the sheaths of the tendons, and produce that lamentable condition of things of which I have before spoken. My own practice is that the moment I see a case of whitlow, and am sure of the diagnosis, to plunge a scalpel through all the tissues well down to the phalanx, and make as free an incision as the parts will permit. I never wait for evidence of suppuration. I am content to relieve tension, obtain local depletion, and make a way of escape for pus in advance of suppuration. This having been done, I soak the incision for a minutes in water as hot as can be tolerated, in order to encourage bleeding. Now is the time to apply the hot poultices without stint and without fear. I then order a brisk purgative or two, rectify any general condition that may be noted, by means of appropriate medicines, and dismiss my patient with fair assurance of speedy restoration to health and work.

The arm has swollen and becomes a deep scarlet in color, with pungent burning pain. The swelling is first œdematous, then tense and brawny with the skin stretched to its utmost capacity. In fact the arm is laboring under the second subject for our consideration, viz., phlegmonous erysipelas. What follows? Resolution occasionally though rarely occurs; but usually, hidden by the change of size and color, pathological changes of a deadly character quickly ensue. Suppuration and necrosis attack the deeper structures involved in the process, both soft and boney, and the sufferer's limb, nay his life also, is in imminent peril. There must be no dallying now with the expectant treatment. The patient's safety lies in the surgeon's scalpel. Numerous parallel longitudinal incisions from two to three inches long, avoiding the positions of the arteries, and sufficiently deep to reach the bottom of the inflammatory process, which, in the limbs, is usually limited by the deep fascia, should be made. This practice was originally introduced by Mr. Hutchinson, and modified by Mr. South so that the parallel incisions should alternate with each other. Here, again the knife should be beforehand with the process of destruction. The relief of tension, the free escape of exuded serum, and the local blood-letting are so many ministering angels to the suffering parts. Should hemorrhage ensue too freely from any of the incisions, it is easily controlled by a plegget of lint stuffed into the incision, and pressure for a few moments by the fingers, or a pad and bandage. The incisions should then be covered with a piece of antiseptic gauze or lint, and hot fomentations or poultices, containing a watery extract of opium to to soothe and tranquilize the injured nerves, should be constantly applied.

Such, in my judgment, is the only local treatment on which much reliance can be placed. It is true, as I mentioned a moment ago, that occasionally under very favorable conditions, and by the aid of appropriate internal remedies which I shall have occasion to refer to shortly, aided by hot external appliances, especially a strong lead and opium lotion, resolution may occasionally take place. But how is the surgeon to foresee this happy result? I know of no rule by which he can govern his action. Extended experience, and profound judgment may enable him to do so, but I fear he is just as likely to err as to hit the mark. My strong conviction is that early incisions through the entire depth of the morbid process, both arrests the progress of the disease and to a great extent limit the area of suppuration and necrosis, and preserve intact, stuctures which, if not so treated, would inevitably become greatly damaged, or even die. On the other hand, supposing the case to be one of the fortunate ones in which resolution would have supervened, and the surgeon has made his incisions. What damage has the patient sustained thereby? Simply little or none. Resolution will be if anything hastened. There will be slight suppuration from the surface of the incisions, but they will rapidly heal, leaving only a few white lines in the skin to mark the site of the battlefield on which disease and the surgeon have measured swords.

In considering the general treatment of such a case, we must not lose sight of the type of patient who is generally the victim of the disease. It is most common, I believe, in those who have been intemperate in eating and drinking. Next to these, I should place those whose health has been impaired by hard work and privation. In both cases, it is well to cleanse the portal system, and unlock the bowels. In the intemperate class, much benefit will accrue from a good, prompt emetic, followed by saline aperients. In the overworked class, I should omit the emetic, and administer warm stomachic aperients. Following this, as soon as the tongue begins to clear, I order tincture of iron, 15 to 20 drops every four hours. I do not possess the faith that iron is useful in cutting short erysipelatous inflammation, such has not been my individual experience, but I place it in the highest rank as the best drug we possess to restore the health of such individuals to its proper balance, and to hasten permanent convalescence. Quinine, mineral acids, and strychnia may also be necessary. This disease is one of those in which I say unhesitatingly, that the administration of alcohol is frequently, absolutely necessary. It has bridged over many a bad case for me, and is in my opinion, one of the most useful drugs we have in combatting the disease. Opium also in many cases is of great service as a stimulant.

I now pass on to the consideration of the treatment of carbuncle. Here again we have a spreading inflammatory condition attacking the subcutaneous cellular tissue, which rapidly runs into slough and suppuration. The slough is characteristic of the disease. The cellular tissue involved, breaks down into greyish or ash-coloured sloughs. The skin covering the part affected, becomes slightly elevated, assumes a purple or brownish red tint, becomes undermined, and gives way at several points, forming openings through which the ash-grey sloughs appear, and from which an unhealthy, purulent discharge, scantily issues. The extent of the disease varies from one to several inches across. The local treatment of carbuncle, is one in which great diversity of opinion exists. Sir James Paget, Mr. Le Gros. Clark, and others emphatically urge the expectant or do-nothing plan. Destruction of the diseased part by nitrate of silver or caustic potash has its advocates, while others regard the time-honored crucial incision as the best method. In view of such diversity of opinion, it may appear somewhat arrogant and presumptious on my part, to speak decidedly in favor of either plan, but every surgeon should have the courage of his convictions, and I have no hesitation in giving my allegiance to the crucial incision. The incisions should be made sufficiently free to reach healthy tissues, both at the base and the sides of the sloughs, and this is the point, to which the surgeon should direct his chief attention. If the incisions are carried short of this, the spreading of the disease will probably continue, and the operation prove in a great measure futile. If healthy tissue be reached by the point of the knife throughout the entire length of the incisions, the spreading of the disease will be immediately checked, the sloughs will be rapidly thrown off, and a healthy granulating surface appear. Profuse primary or secondary hemorrhage may occur, but as the

disease in most cases is situated at the back of the neck and trunk, it is not difficult to apply sufficent pressure to control it. I have made incisions of this character, over five inches in length, and have seen no bad effects therefrom; but on the contrary have been gratified at the beneficial result. So strongly am I convinced of the desirability of the crucial incision, that were I the victim of carbuncle, I should urge my professional attendant to resort to it.

Mr. Timothy Holmes, who is in favor of the crucial incisions, records the case of a "man admitted into St. George's Hospital, in whom a carbuncle had been treated on the expectant plan, and the result was an immense ulcer occupying the whole of the nape. Soon after his admission another carbuncle formed, and was rapidly extending. A crucial incision soon stopped its course, and he recovered with hardly any mark from the second carbuncle, forming a striking contrast to the tremendous ravages of the first."

After the incisions have been made, hot poultices should be applied to hasten the separation of the slough, after which stimulating ointments, such as the Ung. Resinæ or Ung. Terebinthinæ will increase the vitality of the part, and hasten the growth of granulations. I have never had occasion to substitute any of the caustics for the knife, and consequently have no remarks to offer on the plan of treatment by these agents, but I can imagine the objections to their use on account of prolonged pain, and constitutional irritation.

As the disease is one of advancing years, and almost invariably occurs in persons whose constitutions are broken down by concurrent diseases of the viscera or blood, our general treatment resolves itself into one of support and nourishment, and of all our drugs, opium in small, continued stimulant doses, is paramount. Half a grain of pure opium every six hours, increasing the quantity if necessary, acts like a charm. It subdues the pain, equalizes and strengthens the heart's action, soothes the nervous irritability, and produces refreshing sleep. Stimulants also, especially good, sound red wines, porter, and ale are of great service.

Co-existing diseases must of course be treated on their own merits.

I have as briefly and concisely as possible gone over the ground of the treatment of these three affections, merely introducing such of the pathology of each, as is necessary to keep the bent and scope of our discussion directed to the best methods of restoring the damage done by those pathological changes. I have purposely avoided all speculative enquiry into the remote causes of these diseases, and have endeavoured to open the discussion as practically as I could. The surgical point which I have endeavoured to make, is this, that in all three affections, the early and free use of the knife does actually limit the extension of the disease, and is greatly conservative to the integrity of the part attacked, and that in all cases in which deep structures are threatened with destructive inflammation, the employment of the knife should if possible precede the destructive process. If empiricism is understood to mean that which is founded on experience, I must confess myself an empiric, and in that character I beg to express, the hope, that the gentlemen around us to-day, more especially those who live in the country districts, and who are compelled by force of circumstances to be more self-reliant and self-dependant than those who dwell in the cities, will sustain this discussion, and favor us with their practical experiences on these questions. By doing so, they will aid in the advancement of our Association, and assist their professional brethren in their difficult labor of subduing pain, and easing the burdens of their disease-stricken fellow-creatures.

Correspondence.

CONGENITAL CYANOSIS.

To the Editor of the CANADA LANCET.

SIR,—A case of that somewhat rare disease, Cyanosis, occurred in my insular practice the other day, which I detail for the benefit of young practitioners.

A healthy woman of 20 years, M. L., gave birth to her second child on the 22nd instant, whilst under my care. The case was quite regular in all particulars, its only singular feature being its great rapidity. After the breaking of the waters, some fifteen minutes, intense labor pains set in, and with the second pain the child (a boy), came into the world, the whole labor proper lasting not over 30 minutes. As is usual, the child showed the cyanosed condition, but not in a degree to excite alarm, was dressed, and put to the mother's breast as usual, and rested fairly well over night.

The next day, about 2 p. m., I was hastily called in, and found the child in a cyanotic condition, with tremulous chills, and an intense bluish tint over the skin, caused, doubtless, by the diffusion of venous blood throughout the system. I placed the child on its right side, as recommended by Churchill, Meiggs, and others. Gave it a small dose of tinct. digitalis, and bathed its feet in hot water, but without avail, the infant dying just 23 hours after birth. Excepting the abnormal opening of the foramen of Botal, the child was apparently strong and well nourished, and the only

moral I can deduce from the case is, that though the treatment in this case was ineffectual, no medical man should be discouraged in any similar cases, or forbear to try those remedies, either of position or physic, endorsed by many men of reputation, both in Europe and America.

F. B. McCormick.

Pelee Island, May 30th, 1887.

To the Editor of the Canada Lancet.

Sir,—As it is not usual or necessary for the initials of one's degrees to be added to one's name in a communication to a medical journal, and, as I am not in the habit of adding them myself, I cannot see why M. D. is appended to my name with my communication in the May No. of the Lancet. You will not find them in the original MS., or if they are there, some one else must have written them. I am sure I did not.

Yours truly,

Ottawa, 20th May, 1887. Edward Playter.

Reports of Societies.

ONTARIO MEDICAL ASSOCIATION.

The seventh Annual Meeting of the Ontario Medical Association was held in the theatre of the Normal School, on 8th and 9th June; Dr. J. H. Richardson, Toronto, President, being in the chair; Dr. J. E. White, Toronto, Secretary. The attendance was the largest the Association has yet known.

The morning session, June 8th, was chiefly spent in routine business. A congratulatory telegram was, on the motion of Dr. J. E. White, sent to Her Majesty the Queen as follows:—"The president and members of the Ontario Medical Association, representing the medical profession of Ontario, at their annual meeting, desire to express to her Most Gracious Majesty Queen Victoria, their sincere pleasure upon the completion of the fiftieth year of her reign; their steadfast loyalty to her throne and government, and their lively hopes that a beneficent Providence, which has directed and comforted her through her past, may grant health, comfort and happiness for many long years to come."

All present voted on this standing, after which the National Anthem was sung with great enthusiasm, and three cheers for the Queen given, time being taken both in the singing and cheering from the veteran president, Dr. Richardson.

Dr. Henderson's motion of forming a Medical Defence Fund then came up from last year's business. In speaking on the motion, Dr. Henderson said, "there was no more crying need on the part of the medical profession, than the taking of steps to protect themselves from unjust and unfair accusations. The case which called his attention specially to the subject, was one which had occurred in Eastern Ontario, and in which a medical practitioner had been prosecuted three years after he had ceased to attend the patient, who had emerged from sickness with a fair recovery in the opinion of eight doctors who had been afterwards consulted. The judge charged strongly in favor of the defendant, but the jury failed to agree, and the case was liable to be opened at any time, while already $1,000 had been spent by defendant, and his practice greatly injured. If the Association would form a department or a fund to defend in such cases, it would be a powerful means of good; the Association would attract more members, and it would be a means of greater usefulness than at present."

The motion was agreed to, and the following gentlemen were appointed as a committee to bring the subject before the Association at some later stage of the proceedings:—Drs. Harrison, Selkirk; Thorburn, Toronto; Moore, Brockville; Taylor, Goderich, and Dr. Henderson, Kingston.

Dr. Ferguson, Toronto, moved that the following gentlemen be a temporary committee on physiology:—Drs. A. H. Wright, W. H. B. Aikins, Sheard, J. E. White and J. Ferguson, Toronto; MacCallum, London, and J. H. Duncan, Chatham. Carried.

Dr. Graham brought up the question of a medical reference library for this city; pointed out briefly the great advantage of such a library, and shewed how unfavorably Toronto contrasted with the great American centres of Medical Science, as New York, Philadelphia and others. Dr. McPhedran moved, seconded by Dr. N. A. Powell, that Drs. Mullin, Hamilton; Arnott, London, and Henderson, Kingston, be appointed a committee from this Association to act with the committee of the Toronto Medical Society in the formation of a medical library. Carried.

In the afternoon, Dr. Richardsoon took the chair, and the following visitors were introduced to the meeting and welcomed to the platform by the chairman :—Drs. Porter, Gerster, Satterthwaite, and G. H. Fox, New York ; Drs. Cronyn and Hubbell, Buffalo, the latter representing the New York State Medical Association ; Drs. Manton and Duffield, Detroit, the latter being a delegate from the State Medical Society of Michigan ; Dr. J. A. Packard, of Philadelphia, and Drs. Stewart and Cameron, of Montreal.

Dr. Packard (on being introduced) remarked, that there were fierce but interesting discussions at the present time on the subject of reciprocity between Canada and the United States, and on the fisheries question. In the fisheries question it seemed to him there was nothing in it but a cod, not worth eating any way. (Laughter). He was in favor of reciprocity—certainly as far as the medical profession was concerned ; and he hoped the *entente cordiale* now existing in that respect between the two countries would never be broken.

Dr. Cronyn remarked that his friend Dr. Packard omitted the very point that was required. He should have advised the medical gentlemen before him to go to the United States, and take possession there, as he (the speaker) had done many years ago.

The President then delivered his annual address. He said it was difficult for one in his position to choose a subject to discourse upon before such an audience as that before him. It was not desirable for one man to set himself up as an authority, or to deal with any one topic. He therefore chose to make a brief reference to some of the improvements during his experience of forty years in the general methods of medical treatment. Had he chosen anatomy he might, he said, feel more at home in his subject, but it might not be out of place to take a retrospective view of general medical treatment. He had been a close observer of the nature of disease, and had watched the changes which had taken place in the views regarding the nature of disease, and consequently in the modes of treatment. Forty years ago, inflammation was considered to be at the root of almost all diseases. The most incongruous diseases were ranked under the head of "Inflammatory Diseases." As a remedy, bleeding was practised very largely until 1853. In Toronto it was practised for scarlet fever until 1860, frequently with the most disastrous results. He would refer more specially to two diseases in regard to which great improvements had taken place within the last quarter of a century, viz., splenic fever and hydrophobia. Dr. Budd, of Bristol, seemed to have the high distinction of being the first British physician to foresee the importance of the agency of minute organisms in the propagation of disease. Dr. Budd seemed to have been led to this prevision by the fact of the invariable reproduction of every specific disease. Splenic fever was a terrible scourge in Europe, how malignant might be gathered from one paragraph from Trousseau :—"The period of its incubation is very short. An ox which has been at work may return to its stall apparently healthy. He eats as usual ; then he lies down on his side and breathes heavily, while the eyes are still clear. Suddenly his head drops, his body grows cold, at the end of an hour, the eye becomes glazed, the animal struggles to get up and falls dead ; the struggle only lasting for one hour and a half." Devaine, as early as 1859, discovered the presence of minute rods in the blood of animals who died of splenic fever, but it was not until 1863, after Pasteur's researches into the part played by microbes in fermentations, that he suspected their real agency in the production of disease. Pasteur's experiments were well known ; his last experiment was made at the invitation of the president of the Society of Agriculture, and was watched by Pasteur's colleagues, who feared he had been too rash. "A flock of sheep was divided into two groups, the members of one group being all vaccinated with attenuated virus, while those of the other group were left unvaccinated. A number of cows were also subjected to a precisely similar treatment. Fourteen days afterwards all the sheep vaccinated and unvaccinated were inoculated with a very violent virus, and three days subsequently more than 200 persons assembled to see the result. Twenty-one of the twenty-five unvaccinated sheep were already dead, and the remaining four were dying. The twenty-five vaccinated sheep were in full health. A similar result occurred amongst the cattle. The breeders of cattle at once overwhelmed Pasteur with applications for vaccine, and, by the end of 1883 nearly 500,000 animals had been protected." Pasteur's crowning triumph was achieved over that dread disease, hydrophobia, which had hitherto baffled medical skill. After repeated experiments he determined, 1. That the virus attained its most intense virulence in the marrow of the infected animals. 2. That the virus of a mad dog inoculated by trephining under the *dura mater* of a rabbit, always communicated rabies to the animal after a period of incubation of about fifteen days. 3. That successive inoculations with virus so obtained show a marked tendency to a diminution of the period of incubation down to seven days, where the virus seems to have attained its greatest intensity. 4. That portions of these marrows exposed to dry uncontaminated air, gradually lose their virulence until at last it dies out. Vaccine virus was not an invariable protection against smallpox, nor was smallpox itself a protection against subsequent attacks, and more must not be demanded for vaccination for hydrophobia than from vaccination for smallpox. Instead of cavil and doubt, we

ought to lay hold with gratitude and confidence on the grand fact which had been established conclusively by direct experiment, viz.: that some of the most deadly diseases which afflict human and brute creatures are the result of the introduction of micro-organisms into the animal system; that they have been isolated and re-produced generation after generation by the most guarded, precise and definite methods of the laboratory, and that they can be so modified in their strength as to be safely introduced into healthy animals, and so protect them from the deadly effects produced by the unmodified poison. In view of the facts of the discoveries of recent years, they might surely "thank God and take courage" for the future. The difficulties before them were great. The life history of each class of these minute beings was so different, and the conditions under which they must be investigated were difficult, but there was no royal road to knowledge, and perseverance and research were certainly neccessary. Yet they were on the road, and it only needed courage, faith and constant advance to open up newer, larger and brighter vistas of truth.

Dr. Fenwick, of Kingston, then read a paper on "Lacerations of the Cervix Uteri"; Dr. Groves, of Fergus, on "Prostatotomy," and Dr. Ferguson, of Toronto, on "Arsenical Neuritis," upon which some discussion took place by Drs. Covernton, Thorburn, Stewart, Teskey, Sheard and others.

The discussion on Medicine was opened by Dr. Arnot, of London, in an able paper on "Phosphaturia." In the discussion which followed, Dr. Bruce Smith, of Seaforth; McDowell, of Orillia; Brown, of Galt; Powell of Ottawa; and Strange, Thorburn and Ferguson, of Toronto took part.

The next paper was one by Dr. G. H. Fox, New York, on the "Various Methods of Treating Skin Diseases, with Special Reference to the Use of Chirurgical Instruments." Dr. Fox produced photographs of diseases before treatment and of the skin in its restored condition, and exhibited some of the instruments used for punctating and cutting. He also showed two patients he had operated on that day and whose disfigured faces he said his method would, by an earlier application, have perfectly cured. Drs. Graham, Oldright and Holmes took part in the discussion which followed.

Dr. Murray's paper on "Laceration of the Femoral Artery," concluded the afternoon's work.

In the evening, Dr. Taylor, of Goderich, gave a paper on "Extra-Uterine Pregnancy," and Dr. James Ross spoke of two cases which he had met with in his practice. This was followed by a paper by Dr. Gerster, of New York, on "The Antiseptic Principle as Applied to the Treatment of the Primary Induration and Initial Sore in Syphilis." This paper will appear in our columns. Dr. Holmes, Chatham, read a paper on "Puerperal Fever," which was followed by one, by Dr. John H. Packard, of Philadelphia, on "Our Views of the Surgeons of the Last Century." This closed the proceedings of the first day.

June 9th.

Dr. Richardson took the chair at 9 a.m.

Before the programme for the session was taken up the following question was put and discussed:—"Is the continued employment of large doses of fluid extract of ergot likely to be injurious when employed in cases of fibroid tumours of the uterus when operation is inadmissible?" The opinions expressed concurred that no injurious effects were produced.

Dr. Lett, of Guelph, then read a paper on "The Relation between Mental Derangement and Masturbation." This was followed by a very interesting discussion in which Dr. Richardson and others took part. Then followed Dr. Strange's excellent paper on "Points in the Minor Surgery of the General Practitioner," which was listened to with much attention, and out of which arose a very useful and interesting discussion, during which the President warmly complimented Dr. Strange on the ability displayed in his paper, and urged the importance of using the surgical knife in cases of carbuncle and other tumors from blood poisoning. He also stated his practice of making a copious use of alcoholic stimulants in such cases. He said a bottle or a bottle and a half of brandy per day for an adult patient, and a bottle of port wine per day to a child, were nothing extraordinary, and had been followed by the best results.

Dr. Gerster, New York, was loudly applauded on rising to speak. He said common sense had a more important place in treatment than was sometimes conceded. While he agreed with the spirit of the paper, he would not go so far as to state that in all cases caustics should give way to the knife. Circumstances must always determine on the particular course to be adopted. One thing he wished particularly to refer to was the abuse of poulticing. It were better in many cases to dispense with the poultice, after operation, altogether, but it was necessary that patients should be urged to a proper use of it when it was applied.

The Hon. G. W. Ross, Minister of Education, here entered the hall, and on being introduced to the Association was warmly applauded. He responded in a short but thoughtful speech, welcoming the members of the Association. and expressing the wish that they might often meet in the same place. Dr. J. E. Graham, of Toronto, President of the Canadian Medical Association, then read a paper on "Herpes Zoster," which was well received.

In the afternoon, the following cablegram, addressed to J. E. White, Secretary, was read:—"The Queen thanks the members of the Ontario

Medical Association for their kind congratulations. PONSONBY."

Also a telegram from the American Medical Association, acknowledging the friendly greeting of the Ontario Medical Association, and conveying to them their sympathy and good-fellowship.

Dr. Geikie presented for the inspection of the members a tapeworm having its head complete. The specimen was examined with interest, as the head of the tapeworm is not very often seen.

Dr. W. H. Porter, of New York, read a paper "On the Etiology and Pathology of increased body heat in relation to disease, and the use of Antipyretics." He said that, physiologically speaking, animal heat was produced by the motor forces or kinetic energy being converted into heat, or by the universal molecular friction of the microscopic elements of the body. The larger amount of heat, however, was produced by the transformation of the chemical elements of the food, which had a large amount of potential energy, which was given off in the form of heat. He referred to the various temperatures and to some means of determining the causes from which changes of bodily temperature arose. Drs. Temple, Turver, Cronyn, and Covernton spoke on the subject of the paper.

Dr. Satterthwaite, New York, then was called upon to read his paper "On the so-called Uric Acid Diathesis," which was a long and able exposition of the subject, but was not followed by discussion.

Dr. Joseph Workman at this stage entered and was welcomed by the President as the founder and originator of the Association.

Dr. W. H. Aikens brought in a patient with an unusually large growth on her face, for the inspection of members. The woman was 73 years of age, and the growth, which began 23 years ago, weighs from 4 to 5 pounds.

A paper on "The Removal of the Uterine Appendages" was read by Dr. Adam Wright. He gave examples of cases occurring in the General Hospital, Toronto, and discussed the application of the operation of removal to three varieties of conditions. In nervous diseases alone, he thought it unjustifiable as a rule; in fibroid tumors, when hemorrhages endangered life, he approved of the operation; in diseases of the tubes and ovaries, including hydro-salpinx, pyo-salpinx and hæmato-salpinx, the operation, he said, should be performed in certain cases. He reported several successful operations in illustration.

Dr. R. W. Powell, Ottawa, read a short paper on "Pelvic Hæmatocele," being a description of a case occurring in his practice, in Ottawa, in which pelvic hæmatocele was successfully removed, without any operative procedures, through the efforts of nature.

Dr. Palmer, Toronto, explained the intubation of the larynx, and answered a large number of questions on his novel and apparently reasonable method.

Dr. White then read the report of the Committee on Ethics. The committee expressed the opinion that there are few, if any, members of the association who do not possess the ethical knowledge, the sense of honor, propriety and justice, which should at all times govern the conduct of gentlemen, and especially members of the medical profession, in their conduct towards each other, towards their patients and the public at large. The committee recommended that the president, vice-presidents and secretary of the association be a standing committee to whom any alleged breach of ethics by a member might be referred. Recognizing the influence of local medical associations, for promoting intellectual and scientific enquiry, and for the securing of a correct observance of medical ethics, the committee urged upon the members of the Ontario Association the wisdom of keeping alive and strengthening the various local associations, both with a view of their acting as feeders to the central society and of being nuclei for the dissemination of medical ethics throughout the province. The adoption of the report was deferred until the evening session, and the sitting adjourned.

In the evening, Dr. McDonagh, of Toronto, read an interesting paper on "Primary Tuberculosis of the Larynx." The writer expressed the belief that laryngeal tuberculosis sometimes at least, if not always existed prior to pulmonary tuberculosis. He cited one case which had come under his own notice where the patient suffered from hoarseness. A careful physical examination of the lungs did not indicate that those organs were affected. A camel's hair tube was passed over the larynx, and a microscopical examination of the mucus showed tubercular bacilli. He also had the opportunity of making a *post-mortem* examination of a subject at the Hospital, wherein the lungs were free from tubercular disease, but on the other hand the larynx was affected with tuberculosis. The practical value of the establishment of this fact would be, that it would be easier to get at the disease in the larynx than when it reaches the lungs.

Dr. Palmer, at the request of the association, exhibited his instruments for the performance of the operation of intubation. This exhibition raised an animated interchange of views on the respective values of intubation, tracheotomy and simple medication in the cure of diphtheria.

The report of the Committee on Public Health was then presented by Dr. Shaw. The report favored the placarding of houses where infectious diseases existed, and the exclusion of children from schools for at least 28 days after infection from diphtheria, and 49 days after scarlet fever.

Dr. Graham presented the report of the Committee on Ethics. The committee recommended the adoption of the code of ethics of the Ameri-

can Medical Association, with the amendments which their special circumstances might demand. The most important of these he quoted as follows: —"It is derogatory to the dignity of the profession to resort to public advertisements or private cards or handbills inviting the attention of individuals affected with particular diseases, publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints, or suffer such publications to be made; to invite laymen to be present at operations, to boast of cures and remedies, to adduce certificates of skill and success or to perform any other similar acts. These are the ordinary practices of empirics and are highly objectionable in a regular physician." Another clause ruled that no one can be considered as a regular practitioner or a fit associate in consultation whose practice is based on an exclusive dogma to the rejection of the accumulated experience of the profession and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry, while at the same time when the good of the patient is involved, such a man, if recognized by the Medical Association, should not be fastidiously refused from fellowship or consultation. The report went on:—"Another matter which comes under this head we would here mention, namely, the injustice of the present system of club practice. In this province benefit societies are increasing in number every year, and the fees given for medical attendance are, in most cases, quite inadequate. Your committee think it might be well for the Association to give their opinion on this subject."

On the motion for the adoption of this report, Dr. Ross condemned club doctoring as commonly carried on.

Dr. Oldright pointed out that a specialist might be excused for advertising his speciality for the purpose of notifying the public that he did not wish for general practice. Dr. Burnham argued that his experience showed that it was not even necessary for a specialist to advertise his specialty on the door-plate to escape demands for general practice. He had never done so, and even at first he was very seldom troubled with such calls, and later on not at all. Dr. Burnham's remarks were evidently popular with the assembly, as he was frequently applauded. The report was adopted.

The treasurer's report was a favorable one, showing $109 to the credit of the association. He announced that 194 paid up members had attended the meeting this year, and 10 visitors, making a total of 204. The greatest number at last meeting was 145.

Dr. Henderson introduced the report of the committee appointed to consider the question of a medical defence union, as follows:—The committee appointed to report on the motion of Dr. Henderson, regarding the formation of a medical defence union, beg to report that, in their opinion, it is desirable to appoint a committee whose duty it would be to consider appeals from members of this association, who may consider themselves persecuted by unfounded and malicious accusations. If requested, this committee will give professional advice to any member of this association who may be defendant in a case of surgical malpractice, the Advisory Committee to consist of Dr. Moore, Brockville; Drs. Sullivan and Henderson, Kingston; Dr. Day, Trenton; Dr. Malloch, Hamilton; Drs. Thorburn, Richardson and White, Toronto; Dr. Eccles, London; Dr. Harrison, Selkirk; Dr. Taylor, Goderich; Dr. Thorburn chairman of the board. The report was adopted.

The Nominating Committee brought in the following nominations of officers for the ensuing year: —President, Dr. J. W. Rosebrugh, Hamilton; First Vice-President, Dr. H. M. McKay, Woodstock; Second Vice-President, Dr. Moore, Woodstock; Third Vice-President, Dr. Adam Wright, Toronto; Fourth Vice-President, Dr. Taylor, Goderich; General Secretary, Dr. J. E. White, Toronto; Treasurer, Dr. N. A. Powell, Toronto; Corresponding Secretaries, Dr. Fenwick, Kingston; Dr. McPhatter, Guelph; Dr. R. W. Powell, Ottawa; Dr. Shaw, Hamilton.

The following committees have been appointed President, for 1887-'88.

Credentials.—Dr. Caw, Parkhill, Chairman; Drs. Alex. Davison, R. A. Pyne, W. H. B. Aikins, Armstrong, Britton, Barrick, Duncan, Elliott, Carveth and A. Bethume, of Toronto.

Nominations.—Dr. Buchan, Toronto, Chairman; Drs. McKay, Woodstock; Brown, Galt; Holmes, Chatham; Mullin, Hamilton; Worthington, Clinton; A. H. Wright, Toronto; Hilliary, Aurora; R. W. Bruce Smith, Seaforth; Aylesworth, Collingwood; Yeomans, Mount Forest; Henderson, Kingston; Powell, Toronto; Harrison, Selkirk; McPhedran, Toronto; Eccles, London and Waters.

Public Health.—Dr. McKinnon, Guelph; Chairman; Drs. Canniff, Toronto; Shaw, Orillia; Mearns, Petrolia; Meek. London; Wilson, Richmond Hill; Howitt, Guelph; Carmichael, Mount Pleasant; Bryce and T. S. Covernton, Toronto, and Shaw Hamlton.

Legislation.—Dr. Gilmore, West Toronto Junction, Chairman; Drs. Strange, Toronto; Hon. Mr. Sullivan, Kingston; Kitchen, St. George; Lundy, Galt. Herod, Guelph; Millar, Hamilton; C. W. Covernton and Cameron Toronto; Collver, Waterford; Millar and Clelland, Toronto; Cochrane, Omemee; Bigelow, Parkdale; Forest, Mount Albert, and Whiteman, Shakespeare.

Publication.—Dr. A. A. Macdonald, Toronto, Chairman; Drs. Andorson, Millgrove; Cauldwell, Lakefield; McAlpine, Lindsay; McLay, Alymer; Philip, Hamilton; Smith, Orangeville; Winskill,

Brantford; Peters, Toronto; J. L. Davison, Toronto, with the secretary and treasurer.

By-laws.—Dr. Thrall, Woodstock, Chairman; Drs. Rosebrugh, Cotton, Coatsworth, Doolittle, E. E. King, Geent, Gullel, A. Geikie and Bingham, Toronto; Cruikshank, Ellesmere; Freel, Stouville; Burgess, Toronto; Macguire, Guelph; Macdonell, Orillia.

Ethics.—Dr. McFarlane, Toronto, Chairman; Drs. Atherton, Barrick, Baines, McCullough, O'Reilly, Strathy, Sweatman, G. B. Smith and Spencer, Toronto; Sturgeon, Hagersville; Marquis, Brantford; Gaviller, Grand Valley; Mitchell, Enniskillen and Lovett, Ayr.

Necrology.—Dr. Bescom, Uxbridge, Chairman; Drs. Gilpin, Brechin; Hanley, Waubaushene; Tegart, Waterloo; Clarke, Sanderson; Orr, Starke; Spence, Pollard and Watson, Toronto.

Arrangements.—Dr. Burns, Toronto, Chairman; Drs. Wagner, Ross, jr., Palmer, Sweatman, Duncan, Sheard, Oldright, Cameron, Watson, Baines, Wishart; Carson, Riordon and McCullough, Toronto.

Audit.—Dr. Nevitt, Toronto, Chairman; Drs. Forest, Mount Albert; Marlatt, Aylmer; McCamus, Bobcaygeon; Oliver, Niagara Falls; Ross, Clifford; Irving, Kirkton; McKelvey, Brussels; Trimble, Queeston; Wood, Streetsville; Roace, McKenzie and A. R. Pyne, of Toronto.

Papers and Business—Dr. Machell, Toronto, chairman; Drs. Jenner, Picton; Thorburn, Temple, Teskey, Temple, Simpson, Graham, James Ross, Ryerson, George Wright, McDonagh and Wishart, Toronto; Turver, Parkdale; Thom, Streetsville; Robinson, Brampton.

Special Committee on Physiology.—Dr. McCollum, London, chairman; Drs. W. H. B. Aikins, Carson, Ferguson, Oakley, A. R. Pyne, Sheard, White and A. H. Wright, Toronto; Duncan, Chatham.

Advisory Committee, whose members may consult in cases of actions for alleged surgical malpractice:—Dr. Thorburn, Toronto, chairman; Drs. Moore, Brockville; Hon. M. Sullivan and Henderson, Kingston; Day, Trenton; Richardson and White, Toronto; Malloch, Hamilton; Harrison, Selkirk; Eccles, London, and Taylor, Goderich.

The following gentlemen have been selected for discussions in the respective subjects:

Medicine.—Drs. Mullen, Hamilton; Burritt and Geikie, Toronto; Digby, Brantford: Waters, Cobourg; Kaines, St. Thomas, and Forbes, Beachburg.

Surgery.—Drs. Grasett and McFarlane, Toronto; Harris, Brantford; Hon. M. Sullivan, Kingston; Groves, Fergus; Burt, Harris; Dupuis, Kingston.

Obstetrics.—Drs. Powell, Ottawa; Henwood, Brantford; Uzziel Ogden, Macdonald, Toronto; Fenwick, Kingston; Hunt, Clarksburg.

Ophthalmology.—Drs. Bernham, Reeve, Ryerson, Palmer and Rosebrugh, Toronto.

The following gentlemen have been named and specially requested to contribute paper on the subjects selected:

Dr. Daniel Clark, on "Some functional disorder of frequent occurrence in general practice."

Dr. J. H. Richardson, on "Any medico-legal subject."

Dr. J. A. Temple, on "The use and abuse of pessaries."

Dr. Sheard, on "The pathological changes in the blood or tissues wrought by bacteria."

Dr. Oldright, on "The sections and sutures in bullet wounds of the intestines.

The nominations were adopted without amendment.

Dr. Richardson, the retiring president, then led his successor, Dr. Rosebrugh, to the dais, and that gentleman thanked the association for the honor conferred on him.

Papers by Dr. Yeomans, Mount Forest, on "Acute Intestinal Obstruction," and Dr. Turver, Parkdale, on "Physiological Reduction of Temperature in Diseases of the Chest," and one by Dr. Ryerson, of Toronto, on "Ophthalmic Epilepsy," were held as read, time being insufficient in the sessions in which they were to have been given.

It was decided that the next meeting shall be held in this city, when, after the usual votes of thanks, the association adjourned.

ONTARIO MEDICAL COUNCIL.

The annual session of the Ontario Medical Council was opened June 14th, in the hall of the College of Pharmacy, the President, Dr. H. H. Wright, in the chair. In opening the proceedings he (Dr. Wright) expressed his sorrow for the losses the Council had sustained by death during the past year. He proceeded to say he felt assured the Council would co-operate with the Minister of Education in his desire to raise the standard of professional education, and he suggested the revision of the primary and matriculation examination papers with that object in view. At the same time, he did not think it essential that the matriculation in arts should be exacted to qualify a man for the medical profession. He congratulated the Council on the amendments to the medical law which they had obtained at the last session of the Legislature, and expressed their indebtedness to Mr. Gibson, the member for Hamilton, for the tact he has shown in taking charge of the bill and for his kind services in promoting it.

Dr. Henderson, of Strathroy, was then elected

President for the year by acclamation, and returned thanks for the honor conferred upon him. Dr. Burns was elected Vice-President; Dr. Pyne, Registrar; Dr. Aikins, Treasurer. A committee was appointed to strike the standing committees. They presented a report, which was adopted.

Reports of the Board of Examiners, giving the result of the recent examinations and of the Legislative Committee, stating what amendments had been made to the Medical Act, during the recent session of the Legislature, were submitted and referred to the appropriate commitees.

A form of cablegram congratulating her Majesty on her completion of her Jubilee year was moved by Dr. Geikie and carried by a standing vote. The Council then sang "God Save the Queen."

The report of the Treasurer showed, receipts $35,677, expenditure $27,632, balance $8,045.

The communication from the Ont. Med. Association, as to the formation of a medical library in Toronto, was referred to the Financial Committee.

Dr. Edwards' motion that clause 2, section 5 of Rules for Examiners, be amended to read as follows: "Any examiner, member of the Medical Council, or registered practitioner, may be present at any of the examinations; and there must invariably be not less than four members of the board present at every written examination, and not less than two at every oral examination: that the questions of the several examiners shall be retained by them until the day of examination when the necessary number of copies shall be made under the supervision of the examiner himself; that no student shall appear before the Board of Examiners until he shall have satisfied the Executive Committee that he has completed the full curriculum required by this Council; that the examinations shall not occupy more than six hours each day"; was referred to the Education Committee.

The question of the revision of the by-laws was remitted to the Rules and Regulation Committee. Dr. Burn's motion that a supplementary examination to be held for rejected and other candidates, was referred to the Committee on Education.

The report of the Exeeutive Committee was submitted by Dr. H. H. Wright. The committee sustained the decisions of the Board of Examiners in the case of petitions for re-reading, by rejected candidates for 1886. The report was received and adopted.

Dr. H. H. Wright also submitted the report of the Building Committee dealing with the erection of the college building on the corner of Richmond and Bay Streets. The tender for the new building amounted to $60,385.60, which amount will complete the building. The sum of $50,000 has been borrowed for ten years at 5 per cent. per annum interest, with privilege of paying off the principal in sums of no less than $2,500 at a time. The college is expected to be ready for opening on the 1st of November next.

The report was received and adopted.

In the afternoon, Dr. Orr gave notice of a motion providing that the number of territorial representatives to the Council be increased from 12 to 18.

June 16th.

The President, Dr. Henderson, in the chair.

Dr. Williams moved that the examiner in no case report a student as having passed an examination, when on any subject he makes less than the minimum of marks set by the Council for a pass on that subject, but in any case when they may think there are special reasons for granting a degree to such a student they report the same to the Council for its sanction. The motion was carried.

Dr. Campbell's motion that the minutes of the Council be printed, and a copy sent to each member of the college who has paid his annual assessments, was carried.

Dr. Orr's motion as to the increase of the territerritorial divisions be arranged, and that the representatives to the Council be increased from 12 to 18, was held over till next meeting.

Dr. Burns submitted the report of the committee appointed to report on the subject of instituting clinical examinations. The committee recommended that clinical examinations be made compulsory, the General Hospital authorities having agreed to provide every means requisite, and the hospital authorities at Kingston being likely to do the same. The report was read and referred to the Education Committee.

The Council then went into committee of the whole to consider the Legislation Committee's report, which referred to the recent amendments to the Medical Bill passed by the Legislature, and the questions of increased representation at the Council, and the holding of examinations in London. The report stated that the committee took no action on these two questions, and that their efforts in obtaining legislation that cases of non-payment of assessment dues be sued in Toronto instead of the County Courts met with the disapproval of the Government.

The Council, on resuming, adopted the report.

June 17th. Dr. Henderson in the chair.

Dr. Henry moved, seconded by Dr. Orr, "That legislation be obtained to compel the municipal corporations to make provision for the payment of medical men for attendance on its poor; that the whole question be referred to the Legislation Committee, with instructions to endeavor to procure the same; and that the Registrar be instructed to send a circular to all registered practitioners in the Province, requesting them to use their influence

with their respective members in the Local House to strengthen the position of the committee to procure legislation."

It was moved by Dr. Campbell in amendment, that the following words be added after the word "same": — "Whenever the Legislature is approached for further amendment to the Medical Act." The motion was carried as amended.

Dr. Logan moved, seconded by Dr. Geikie, "That in view of the late change in the Imperial Medical Act, it is desirable on the part of this Medical Council to determine the conditions upon which British graduates may be registered in Ontario." Carried.

On motion of Dr. Williams, seconded by Dr. Moore, it was resolved, "That a special committee consisting of Drs. Fowler, Geikie, Logan, Wright, Bergin and the mover be appointed to consider on what terms British graduates may be allowed to become registered and practise in Ontario: that they report at the next meeting of the Council, and that in the meantime they be not allowed to register except in the ordinary way of examination."

Some discussion followed, and Dr. Campbell moved in amendment, "That this Council admit British graduates to registration in Ontario on the same terms on which Ontario graduates are registered in Great Britain."

The amendment was lost, and the original motion carried.

Dr. Edwards presented the financial report, and the Council went into committee of the whole, on the report; Dr. Campbell in the chair.

Discussion arose on the formation of a library in the new College, for the use of medical men both in the city and county.

Drs. Graham and Powell addressed the Council on the subject, and it was finally decided "That a room be placed at the disposal of the Ontario Medical Library Association, at a nominal rental."

The suggestion of the committee, that the examiners should be paid $50 each for extra work, was acted upon. The examiners were also allowed $3.50 per day as travelling expenses, while absent from their homes. The remainder of the report, which was adopted, recommended the paying of members' expenses while attending the Council, and stated that after paying all accounts, there was a balance in the Treasurer's hands of $8,045.63. Accounts to the amount of $1,587.45 were recommended to be paid.

The assets and liabilities are as follows:—Site of building, $20,000; new building so far as completed, $19,905; assessment dues, $7,500; cash in bank, $8,045.63; total, $53,450.63. Liabilities:—Mortgage, $15,000; accounts just passed, $1,587.45; extra expense of session, $1,900; total, $18,487.45; balance, $36,963.18.

In the afternoon, the Building Committee of last year was re-appointed. Executive Committee as follows:—the President, Vice-President and Dr. Edwards.

It was moved by Dr. Russell, seconded by Dr. Harris, "That the Executive Committee appoint a public prosecutor and prescribe his duties." Carried.

On motion of Dr. Day, seconded by Dr. Williams, "That leave be now granted to introduce a by-law to appoint a committee for the purpose of carrying out the Act passed at the last session of the Provincial Legislature, entitled 'An Act to amend the Ontario Medical Act'; that the same be now introduced and read a first time and referred to a committee of the whole."

The Council went into committee of the whole on the by-law.

The by-law was read a third time and adopted. It is as follows:—The Council, under and by virtue of the powers and directions given by sub-section 2 of section 5 of chapter 121, 50 Victoria, entitled "An Act to amend the Ontario Medical Act," enacts as follows:—(1) The committee for the purposes of the said section shall consist of five members, three of whom shall form a quorum. (2) The committee shall hold office for one year, until their successors are appointed. (3) The committee appointed shall be known as the Committee on Discipline. The following gentlemen compose the committee:—Drs. Logan, Bray, Day, Russell and Wright.

The President read the following cablegram,—"WINDSOR, June 17.—The Queen desires me to thank the Medical Council of Ontario for their kind congratulations. (Signed), PONSONBY."

EVENING SESSION.

Moved by Dr. Ruttan, seconded by Dr. Fowler, "That the thanks of the Council are due to the College of Pharmacy, for the use of their building during the present session of the Council." Carried.

Resolutions of condolence were passed in reference to the deaths of Dr. Fulton and Dr. Barrett. The Registrar was instructed to send a copy of each resolution to the families of the deceased.

The report of the Committee on Discipline was read and received.

The report of the Committee on Education was read by Dr. Williams, and the Council went into committee of the whole to consider it. Dr. Day in the chair. The report was adopted. It dealt with a number of students who failed in their examinations, complaining that their papers had not been properly marked by the examiners. It also recommended that Mr. L. Hittemanch be allowed the short primary examination on account of service in the late rebellion and of not receiving sufficient notice at the late examination. Mr. J. M. Penhall was also permitted, on account of having

taken three courses in Canada and one at Bellevue, N.Y., to present himself and he would be admitted. The committee also suggested that the Council take steps to have a representative on the Senate of the Toronto University, as such privileges are extended to other bodies, including the Law Society.

The following were appointed the Board of Examiners for 1887 :— Anatomy, descriptive, Dr. Grasett, Toronto ; Theory and Practice of Medicine, Dr. Irwin, Kingston ; Midwifery, Dr. J. McArthur, London ; Physiology and Histology, Dr. H. P. Wright, Ottawa ; Surgery, Dr. J. H. Cameron, Toronto ; Medical and Surgical Anatomy, Dr. J. Wishart, London ; Chemistry, Dr. R. A. Reeve, Toronto ; Materia Medica, Dr. H. McKay, Ingersoll ; Medical Jurisprudence, Dr. D. S. Elliott, Orillia ; Homœopathic, Dr. Evans, Toronto.

The proceedings were brought to a close at 10.30 p.m., and the Council adjourned *sine die*.

Selected Articles.

NOTES ON THE CAUSE AND TREATMENT OF FUNCTIONAL INSOMNIA.

At a meeting of the New York Neurological Society, May 2rd, Dr. B. Sachs read a paper on this subject. Under the term he included cases of insomnia pure and simple, occurring in persons of the neurasthenic habit. He preferred to say neurasthenic rather than hysterical, for in his experience actual insomnia was less frequent in truly hysterical patients than in those suffering from cerebral or spinal neurasthenia. A number of typical cases were cited The author thought that in the majority of such cases there was good evidence of disturbances in the cerebral circulation. As it had been found in animals that an increased activity of the cerebral circulation was accompanied by a deficient circulation in the peripheral parts, so in many cases of chronic insomnia cold extremities, pallor of the skin, and a scanty uterine flow pointed to a deficient peripheral circulation, and in many of these cases there was weakness of the heart, with a weak pulse. Special attention was called to the simultaneous occurrence of insomnia and headache, and to the fact that as a rule the headache was of the paralytic migraine type.

The treatment of migraine and that of insomnia were similar in many respects. The author wished particularly to insist on the point that continued hypnotic medication was worse than useless. The good results obtained by him had been due to close attention to matters of general regimen ; to the treatment of anæmia ; and to the strengthening of the force of the heart's action by cold douches, by the regulation of exercise, and by the methodical performance of definite forms of active physical exercise, such as riding, rowing, and mountain climbing. Hypnotics were of use only at the outset of treatment ; among these the reader mentioned chloral and bromides, to be given at night, or bromides alone, amorphous hyoscyamine, urethane, and paraldehyde. Their use should be discontinued as soon as a slight improvement was noticeable, and from that time onward general treatment was to be pushed vigorously.

Dr. Fisher thought that a very common cause of insomnia was anæmia, and he had seen considerable success in its treatment with cod-liver oil, cream, and other articles intended to improve nutrition. In some of the cases ordinary hypnotics had been administered without any avail. The patients might have the appearance of being well nourished while they were really anæmic. The mineral tonics were indicated, as a rule.

Dr. George W. Jacoby thought the paper was an exceedingly important one, especially in that it called attention to the fact that many patients with insomnia could be cured without the use of any medicines whatever. He agreed with the author that it was necessary to discriminate as to the cause of the wakefulness. He thought that in the majority of cases the cause would be found to lie in the circulation—not always in anæmia, but frequently hyperæmia. The cause being done away with, the sleeplessness would be overcome, but that which would cure anæmia in one case would not cure it in another. Active and passive exercise, particularly active exercise, were of benefit. For patients who could not go out, the muscle-beater was very useful. While he had not much faith in static electricity in the treatment of insomnia, he cited one case in particular in which a physician, who had applied it to one of his patients for another purpose, himself became sleepy under its influence. Perhaps the production of ozone by the instrument was the cause of this sleepiness, for it was well known that when we went into an atmosphere of ozone we were likely to become sleepy.

Dr. V. P. Gibney had noticed that static electricity tended to produce sleep. It was one of the few things that it had been found good for at the hospital with which he had formerly been connected. Dr. W. R. Birdsall thought, with the author, that we must adopt hygienic rather than purely medicinal measures for the cure of insomnia, but we were occasionally forced, as the author had said, to resort to some drug for temporary effect. For this purpose he had produced benefit without injurious effects—such as sometimes came from the use of the bromides, hydrate of chloral, etc.—with a drug first recommended to him by Dr. Seguin, namely, conium. This, given in large

doses, fifteen or twenty drops, or more, of the fluid extract, had in his hands been beneficial. He had continued its use two or three months without deleterious results.

Dr. G. M. Hammond thought that fully eighty per cent. of all his patients were similar to those described in the paper—persons suffering from insomnia, mental anxiety, etc. In the large majority of the cases he thought insomnia was due to hyperæmia of more or less limited areas of the brain. When the patients did sleep, they had unpleasant dreams. They were also frequently sufferers from dyspepsia, constipation, spots before the eyes, noises in the ears, sometimes hallucinations connected with various senses, and coldness of the extremities. It was rare for such patients to go away without being cured, but, if they subjected themselves again to the same causes, the condition returned. He used bromides, and stuck to them right through the disease. He gave only ten or fifteen grains three times a day, and also gave fluid extract of ergot. He applied static electricity and dry cups to the back of the neck, and regulated the sleeping hours. Dr. Leszynsky had been rather surprised, in view of a recent discussion before the society, to hear the author speak of the use of hyoscyamine as a hypnotic. It was a mistake to rely upon large doses of bromides given at night. There was an objection to their use in the case of ladies, because of the bad odor which they gave the breath. He had not been able to discover any peculiarity in the circulation of the retina in these cases. Dr. Weber said that since he had adopted the treatment recommended by Dr. W. A. Hammond, and just described by Dr. G. M. Hammond, he had obtained the best results in suitable cases for this mode of treatment. But in other cases the bromides might cause excitement instead of aiding sleep. When there was gastro-intestinal disorder, he added to the treatment the use of calomel, with benefit. Dr. Leszynsky referred to a remark by Dr. Birdsall concerning the use of a sinapism, or other cutaneous irritant, and said that Dr. W. H. Thompson had called attention some years ago to the beneficial effects of Cayenne pepper and like irritants to the surface of the body.

The President had found the warm bath a very valuable measure in many cases; in mild cases of insomnia the cold douche down the back and massage, had proved useful. Bence had discovered that ozone had hypnotic influence. Lupulin had been of benefit in the insomnia of old people; and lavender in some cases in which the stimulus of alcohol or warm food had failed.

Dr. Sachs objected to the use of the bromides, particularly in small doses, more than to anything else in the treatment of the class of cases under discussion, namely, those of insomnia in neurasthenic subjects. It was likely to do more harm than good. The testimony at the discussion referred to by Dr. Leszynsky had not been against amorphous hyoscyamine, but against the crystalline form.—*N. Y. Med. Jour.*

REMARKS ON THE RADICAL CURE OF HERNIA BY INJECTION.

DR. C. B. KEETLEY, F.R.C.S.

The following paper may be taken as supplementary to one already published in the *Journal* (1885, vol. ii, page 543), and originally read at the meeting of the British Medical Association at Cardiff.

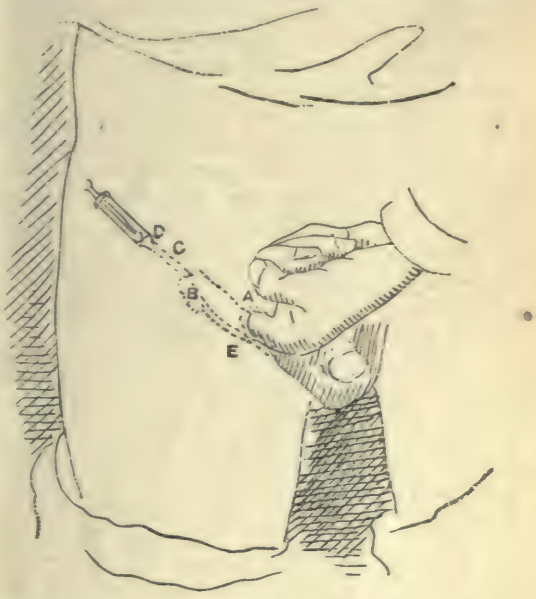
I have first to say that I found the combination of cannula and syringe somewhat awkward in practice; once or twice the two came apart as I was withdrawing the cannula, allowing an uncertain quantity of the injected fluid to escape, and compelling me to guess vaguely how much more to inject to make up for the loss. For this reason I caused to be made the injection-syringe described in the *Journal* for July 17th, 1886. This I now show to you, and you see it is a probe, cannula, and syringe all in one instrument, besides having certain other advantages, such as requiring only one hand to fill, empty, and otherwise manipulate it, and being very easily aspecticised.

I have further to report three specially interesting cases, all in adults, in one of which I used the injection only, while in another I felt it prudent to refrain from using the injection, and to employ merely the suture, and in a third I adopted an entirely different mode of operating—one which neither requires the use of an anæsthetic nor prevenfed the patient from doing his business. The first and second cases were operated on at nearly the same time, namely, March 16th and April 14th, 1886. The successful case was a young adult man, with a left inguinal hernia of moderate size, coming through a canal also of moderate size. He was admitted into the West London Hospital, and a simple injection of concentrated decoction of oak-bark was thrown into his inguinal canal, no suture being placed in the canal-walls or apertures. A thickening rapidly formed at the site of injection, which felt very much like a crown-piece wrapped up in a piece of lint. This gradually got less, but some months after the operation, he had had no return of either the hernial impulse or hernial swelling. He usually wears a truss by way of precaution, but I shall not fear to let him discard it when next I see him. The other and less fortunate case was that of a very stout gentleman, who came up from Yorkshire to be operated on. I may mention, by the way, that his brother had suffered from hernia, and been cured by injection in America. In ten years of operative experience, I have never had so many minor misfortunes and pieces of what

I will call, out of charity to myself, "ill-luck" as I suffered in connection with this patient; they all arose out of a bad commencement. In giving the patient a list of two or three lodging-houses, I included one which, though excellent in itself, was not a good one for our particular purpose. I recollected this immediately; but, expecting to see the patient next day, and having arranged not to operate for a day or two, I thought I should have an opportunity of setting things right. Unfortunately, I did not hear again from my patient till the eve of the date fixed for the operation, and he had in the meantime taken rooms with an exceedingly bad light. A corner window on the ground floor, looking into the bottom of a kind of pit, and the enormous bed in the room, when placed in such light as there was, blocked the way in such a manner as almost to paralyze the nurse and greatly interfere with the assistant. Further, the eventful morning was dark and dull, even for London; and we had to use candle light. My assistant was more than fully occupied in endeavors to retract the fatty walls of the wound; these were so thick and deep that it was not until I had made an incision three if not four times as long as the usual one, that I could get proper access to the inguinal ring and its pillars. When I now proceeded to put in the thick catgut suture with a handled needle, the shank of the latter bent with the effort necessary to bring the eye into view after it had passed through the pillars. There was a good deal of oozing, and the nurse being occupied in holding the candle, while the assistant's hands were monopolised by the retractors, I had to sponge for myself. When the suture was properly inserted, I paused to reflect ere I injected a powerful irritant into the inguinal canal, after all the parts had necessarily been subjected to much rough usage.

Had we been engaged on some necessary operation, such as an amputation, to go on and make a thorough finish of it would have been a matter of course; but here was a very different state of things. My main object in doing these operations of injection is to find a really safe and reasonably certain mode of doing the radical cure of hernia. I would therefore infinitely rather fail to do any good than risk doing any harm. Therefore, considering the unusual stoutness of my patient, the large wound it had been necessary to make, the rough usage to which it had been subjected, the unreliableness of the antiseptic precautions which it had been possible to take under the circumstances, and the doubt whether, even under the most favorable conditions, injection would do much good to a hernia coming through such an immense aperture (it would admit four fingers), I determined to refrain from exposing my patient to the risks associated with injection into his canal. Had I had him on the hospital operating-table, in an excellent light and surrounded by plenty of assistance, I should probably have there and then tied the neck of the sac, excised the fundus of it, sutured the ring, and confidently expected a good result. But this course was here at present out of the question, although I had obtained my patient's leave to do as I liked. I therefore merely put a little of the injection on the sutured ring, placed a drainage-tube, sponged and cleansed the wound with $\frac{1}{1000}$ sublimate lotion, and dressed with turf-moss dressing, etc., sublimated in the usual way.

Very glad I was afterwards that I had refrained from putting the injection into the canal, otherwise I should have probably had to deal with an abscess in the abdominal walls between the muscles, for the wound did not heal by first intention, and there was a good deal of suppurating with some sloughing. In addition to this, an attack of pneumonia with rusty sputa, high temperature, etc., developed in a few days, and kept the patient incessantly coughing, besides causing me some



anxiety, and compelling me to pay the most rigorous attention to the wound, with a view to preventing septic absorption. I used to dress it three times a day. The pneumonia was partly aggravated by his being kept always on his back with the foot of the bed raised, and disappeared rapidly as soon as I allowed him to sit up a little. The hernia remained up for a fortnight, and then came down in a fit of coughing.

The suture had given way, and I removed it through the wounds, which was still unhealed. I then let him sit up in bed, and all signs of the pneumonia quickly vanished, showing that whatever had been the original cause, it had been kept up and increased by the statical effect of the continued supine position with the lower extremities

raised, and the head and chest lowered. A good deal of effusion had taken place about the ring, which was diminished in capacity by the thickening, so that I hoped a truss would now keep up the hernia (which would be some advantage gained by the operation). During the few days the patient remained in town, walking about and standing, the hope seemed likely to be fulfilled; but our misfortunes were not at an end. The new truss, which he was now wearing with success, was sent to the maker's, that it might come back with another like it the next day when he had to return to the north. But the makers sent away the truss to some factory out of London, and when he was about to go to the train, they would give him neither the truss nor the duplicate, nor did they have in the shop another truss which was quite effective. When eventually he got the two trusses, he being then in Leeds, neither the new one nor the old one would keep up his hernia. There is really more to be learnt from this case than from the succesful ones individually. From it I nocclude that, when the patient is very stout, a first-class light, an extra assistant and an extra stout needle are required.

Secondly, I see that, in certain patients, unless it is possible to take the most complete antiseptic precautions, very troublesome suppuraton may occur even after the simple operation in question.

Thirdly, this case furnishes one more instance of the uselessness of the suture without the injection: though it is but fair to say that this was a direct hernia, with no oblique valvular canal such as would be favorable to suturing.

Fourthly, that, as might have been expected, the position usual after all operations for radical cure of hernia is exceedingly bad for patients exposed to the causes of lung-affections.

Having by my open operations of injection, become sufficiently familiar with the parts, I wished to try subcutaneous injections, and was soon fortunate enough to get for a patient an able and observant surgeon who had himself been already operated on by as good a surgeon as any in these islands, but unsuccessfully, the form of operation having been an attempt to obliterate the canal with a gold wire passed subcutaneously, and left *in situ*. This was a right inguinal hernia with a short canal, but not direct.

My procedure was as follows. First, I requested my patient to get a brand-new morphia injection syringe, with a long, stout needle, and also a small quantity of absolute alcohol in a stoppered bottle. Both these were kept entirely for his own use, the former always remaining in his possession. Every other day, I injected five drops of absolute alcohol into the inguinal canal. The needle was used in the following manner:

Invaginating the scrotum, I passed my left forefinger up the inguinal canal as far as the internal ring, the patient lying supine. With my right hand I now inserted the needle, making it pierce the skin external to the middle of Poupart's ligament, that is, nearer the anterior superior spine of the ilium, and passed the needle-point from without inwards and backwards, till, going through the external oblique aponeurosis, it touched my forefinger-tip lying in the inguinal canal. the point of the needle was now, of course, itself in the canal, and directed downwards and inwards, in fact, nearly in the axis of the canal. The next step was to take my finger out of the canal, leaving the needle-point in it. My own sight and the patient's own feeling used to assure us that the hernia remained reduced; but, even had it slipped down, it could not have been wounded by the needle lying point downwards and inwards, in the manner I have described. The injection was now made, and the needle withdrawn; a smart burning sensation was felt for half a minute (it was timed accurately by a watch), and then disappeared entirely, as though the alcohol had a secondary anæsthetic action.

What were the results of these injections? Either the second or third injection produced a thickening in the canal about the size of a small Spanish nut; and a few more injections, or rather, the last of them produced a swelling as big as a plover's egg, or bigger; it completely blocked up the canal, and was decidedly tender, as well as somewhat painful for a day or two.

Both my patient and myself were now hopeful of success; but, alas! as the swelling subsided, it became probable that it was in the cord, and not in the loose tissues of the canal, because it gradually descended in the canal, till it was all at the external ring; it is needless to say that a swelling there will not cure an oblique hernia.

The patient leaving town, treatment was now discontinued for two months, at the end of which time he returned, stating that his hernia did not come down so readily or so frequently as before; and that he was convinced that we had only to get the injection higher up, namely, to the internal ring, in order to obtain a cure. I was entirely of his opinion. He could only stay in town a very short time on this occasin, so I resolved, with his consent, to inject a more powerful irritant this time. Accordingly, I put in five drops of fresh glycerine of tannic acid; the reaction was tremendous; an immense swelling filled the canal, and descended out of it along the cord towards the scrotum. There was a good deal of pain and fever for a few days, and I kept him in bed; he had been walking about during the preceding treatment; but, again, the injection was too much in the coverings of the cord, so that, as the swelling subsided, the weight of the testicle dragged its remains down towards the external ring. My patient, who is in the army, had now to leave London on duty.

Now, I have no doubt in my own mind that I placed the needle point as high up the canal as the internal ring; and while my finger remained in the canal the cord was guarded effectually enough. But I was obliged to withdraw my finger before injecting, or, as actually happened in the only instance in which I did not, the injection would have gone into the tissues of the invaginated scrotum. During the operation, the tendency to retraction of the cord and testicle was marked, and doubtless the cord, so to speak, impaled itself on the needle as soon as my finger was withdrawn from protecting it. By the cord, I mean its coverings rather than the vas deferens, etc.

It is plain to me that there are two ways in which this simple operation can be perfected: 1. The needle can be provided with a protecting cannula, which should be slipped over its point before the finger leaves the canal. 2. The testicle should be dragged downwards as far as possible while the injection is being given.

There are very serious objections to the latter plan, and the former is the one I shall try at the first opportunity. I am sorry that the necessary departure of my patient prevented it being tried on him. His intelligence, his professional training, and his thorough understanding of his own case greatly increased the value of it.

I hope it will be borne in mind, in considering my paper, that what I am in search of is not an effective radical cure for hernia, but a safe one. I mean one so safe that any surgeon would as readily submit to it as to the opening of an alveolar abscess. Further, what is wanted is not an operation which is only safe in the hands of a very select few men of exceptional skill, knowledge, and experience, but one which can be satisfactorily done by any intelligent and careful surgeon who will take the pains to learn it, and to study the anatomy and pathology of the affection he proposes to treat.

I will take this opportunity of stating that I have this week examined the first patient on whom I operated for the radical cure of hernia by injection. He is a stout, middle-aged gentleman, who used to be greatly troubled by a double inguinal hernia, which came down even as he lay in bed. The result of the operation is in this case perfect. During the two years which has now elapsed, he has neither seen or felt anything of either rupture; except in the first month of convalescence, he has worn no truss, and there is no impulse. This case was operated on at the Fitzroy Home Hospital, in the presence of Messrs. R. Wharry, S. Benton, and J. Mills.—*Br. Med. Jour.*

THE BACILLUS OF ACUTE CONJUNCTIVAL CATARRH.—Week's paper ("Arch. of Ophthal," xv, 4) is based upon its own observations and cultivation experiments. The first case occurred in a woman, aged thirty, in whom there was a rather profuse muco-purulent discharge. Weeks made a dry cover-glass preparation of the secretion, stained it with gentian violet, and examined the specimen with a one-twelfth oil immersion The examination disclosed large numbers of small well-defined bacilli, which were aggregated on and in the pus cells, and free in the mucus. He then examined the secretion from the eyes of five persons in one family affected with acute conjunctival catarrh, and found the bacilli in all. He then determined to ascertain positively the contagiousness of the secretion by inoculating healthy conjunctivæ with secretion from an affected eye. At first, rabbits were used, but no conjunctival inflammation was induced. He then inoculated the healthy conjunctivæ of six eyes in five men who had previously lost their vision. In five of the six eyes inoculated the same form of conjunctivitis was produced, the bacilli being found in the secretions. Weeks has observed about one hundred cases of this disease since March, 1886. Attempts were made to cultivate the small bacillus on agar-agar and gelatin, in tubes and on plates, but the bacillus did not develop. On particles of pus transferred to the tubes the bacillus developed rapidly, but could not be induced to feed on the agar-agar. A mixture was then prepared containing only about 0.5 per cent. of agar-agar, and the bacillus developed feebly in this preparation in tubes. The bacillus in the tubes was contaminated with a club-shaped bacillus, and repeated attempts to separate the two proved fruitless. On the one-third per cent. to one-half per cent. solution of agar-agar in tubes, the bacillus with its contamination was carried to the sixteenth generation. Although repeated attempts have been made to cultivate this small bacillus on sterilized blood-serum, they failed to carry it beyond the second generation. It developed rapidly in beef-tea, and very feebly on potato. On agar-agar, but little growth can be seen during the first twenty-four hours. At the end of forty-eight hours a slight haziness appears along the track of the needle, and on the surface of the agar-agar a small elevation is noticeable, of a pearly color and glistening surface. By the formation of concentric colonies, the growth extends for a short distance from the point of puncture on the surface of the agar-agar. The growth reaches its height in from five to seven days, at which time the above described appearances are but slightly exaggerated. The bacillus then gradually degenerates, breaking up into small particles. The one-half per cent. agar-agar is the best medium yet found on which to cultivate this bacillus. An even temperature of from 34° to 37° C. is most favorable for the development of this microbe; it is also necessary to have abundant moisture. The bacillus varies considerably in length, being from one to two micro millimetres long; in thickness it is always

the same—about 0-25 of a micro-millimetre. In preparations from cultivation on agar-agar, Weeks has observed a number of the bacilli joined, forming quite long threads, but there was never any tendency to a double arrangement as in *Bacillus subtilis* or in Leber's bacillus of xerosis of the conjunctiva. The bacillus under consideration stains readily with watery solutions of fuchsin, gentian violet, and methylin blue. There is nothing peculiar to this bacillus in the effect produced upon it by the various acids, alkalies, alcohol, chloroform, or ether. A number of inoculations of the human conjunctiva have proved to the satisfaction of the author the innocence of the clubbed bacillus in the production of acute conjunctivitis. The bacillus in question is present in these cases of acute catarrhal conjunctivitis, as long as the yellowish discharge persists. Sections of the conjunctiva in some of the cases, obtained by cutting out small portions from the low *culs-de-sac*, showed the bacilli in rather scanty numbers in the anterior layers of the epithelium, either singly or in small colonies lying between the cells. Some leucocytes or pus-cells found in the epithelial layer, showed the bacilli apparently in the interior as well as on the surface of the cells. Weeks has never met with this bacillus except in the form of acute conjunctivitis just described.—*N. Y. Med. Jour.*

PUERPERAL PERIOD.—It is a mistake to not apply an abdominal bandage after delivery has been effected. The muscles have been trained to the utmost extent, and require to be supplemented by artificial aid until their normal contractile power is restored. A well-applied bandage not only adds to the immediate comfort of the patient, but, by checking the sagging of the abdominal walls and the consequent formation of a pendulous abdomen, prevents many a future regretful pang.

It is a mistake to not administer a laxative to the puerperal woman until the third or fourth day. If constipation is hurtful to a man of active habits, it is certainly not beneficial to a woman confined to bed in a warm room and surrounded by exhalations of a more or less unpleasant character. Many cases of so-called septicæmia are produced or aggravated by the absorption of putrid material from the intestines, and disappear after a brisk purgative is given. The health and comfort of all puerperal patients would be promoted by the administration of a gentle laxative twenty-four hours after delivery.

It is a mistake to use antiseptic vaginal, or uterine injections as a matter of routine practice. If the lochial discharges become offensive, or if there be reason to suspect the presence of placental or other débris in the uterus, they may be employed, but not in any other case. Intra-uterine injections should always be given by the physician himself, and not intrusted to a nurse.

It is a mistake to suppose that a rise of temperture in puerperal women is always due to septic infection. She is not exempt from any of the grave diseases which attack humanity. Many slight febrile attacks are due to the irritation of unnecessary injections, others are produced by cold, malaria, and nervous disturbances.

It is a mistake to regard quinine as the anti pyretic *par excellence* in all diseases of the puerperal period. Quinine is invaluable in the treatment of septic and malarial fevers, but in purely inflammatory affections it is much inferior to aconite and veratrum viride.

It is a mistake to restrict the diet of a puerperal woman to bread and tea, or gruel and similar articles. Rest for the stomach as well as for the body is imperative during the first few hours succeeding delivery, but after then it is unnecessary, as well as injudicious, to keep the patient upon low diet. Milk, soups, oysters, eggs, beefsteak, and fruit may be freely partaken of. Cold water may also be drank *ad libitum.*—*Editor Med. Bulletin.*

THE NECESSITY OF EXAMINING THE MOUTH BEFORE GIVING AN ANÆSTHETIC.—It may seem superfluous to repeat a caution which is contained in every text-book on minor surgery, but one is apt at times to grow a little careless, and to forget small details when the mind is occupied with anxious thoughts. When an operator has so many assistants that one can give his undivided attention to the administration of the anæsthetic, as should always be the case where possible, any omission of such details is, of course, inexcusable. But it often happens, in cases of emergency, that the assistant must not only give the anæsthetic, but also assist the operator in many other ways. He is then liable to forget the possibility that something may be in the mouth, which is not unlikely, when anæsthesia is complete, to become loosened and fall back into the air-passages. It may be, that the patient has a false tooth, or several false teeth attached to a plate, or a palate obturator, or some other apparatus to supply a deficiency in some part of the jaw. Children are very apt to have marbles, lumps of sugar, pieces of cake or candy, or the like, which some fond relative has given them to help them to bear the approaching ordeal with greater courage. Any one of these objects is liable to be drawn into the larynx when all the muscles are relaxed and reflex movements abolished, and when the patient is taking deep inspirations.

An accident of this nature is related by Dr. Trossart in a recent number of the *Lyon Médical.* The patient was observed to be vomiting almost continuously at the commencement of the anæsthesia, and afterwards, when the head was turned over, a plate, with four teeth attached, fell out of the mouth. The object in this case was so large,

that it could not enter the larynx, but was drawn into the pharynx, and excited reflex efforts to vomit. Had it passed farther down, and become lodged in the œsophagus, the results might have been far from trivial.

Similar accidents have happened more than once, and a repetition of this caution would seem, therefore, to be worth the while. The cautious, and those who always have their wits about them, will pardon the repetition for the sake of their brethren with weaker memories. Always, as a matter of routine, examine the mouth of every patient before commencing to administer an anæsthetic. A neglect of this apparently trifling detail may cost a life.—*Med. Rec.*

ANTISEPTICS IN THE TREATMENT OF DIARRHŒA IN CHILDREN.—Dr. Emmett Holt, in an interesting paper published recently in the *N. Y. Medical Journal*, says in conclusion:

Is not the rational treatment then, to clear out the intestine as promptly and thoroughly as possible, and then address our energies towards stopping further decomposition? In other words, to treat the cause and not the result?

How should the antiseptic be administered?

The salicylate of sodium I have been accustomed to prescribe in doses of from one to three grains every two hours, according to the age, from three months to three years. In these doses the aqueous solution is tasteless, and can be readily given in food or drink. I have never seen it produce vomiting, but often have seen severe and persistent vomiting controlled by it.

Naphthalin, although possessing a strong odor, is not disagreeable to the taste. On account of its insolubility, it is best given to children rubbed up with some inert powder, like sugar of milk. It should be used in a little larger doses than the salicylate—*i. e.*, gr. j to gr. v in young children, according to the age.

Resorcin must be used in smaller doses, gr. $\frac{1}{2}$ to gr. ij, at corresponding ages. It is bitter, and not so easily given, though freely soluble in water. The bichloride was used in doses of gr. 1-120 to 1-100, but, even in these doses, I have more than once seen it produce vomiting.

In all cases I have insisted upon the antiseptic being given at short intervals, as many small doses are much more likely to succeed than a few large ones.

From the foregoing discussion the following conclusions are drawn:

1. Summer diarrhœa is not to be regarded as a disease depending upon a single morbific agent.

2. The remote causes are many, and include heat, mode of feeding, surroundings, dentition, and many other factors.

3. The immediate cause is putrefactive changes which take place in the stomach and bowels in food not digested, which changes are often begun outside the body.

4. These products may act as systemic poisons, or the particles may cause local irritation and inflammation of the intestine.

5. The diarrhœal discharges, at the outset at least, are to be looked upon as salutary.

6. The routine use of opium and astringents in these cases are not only useless, but, in the beginning particularly, they may do positive harm, since, by checking peristalsis, opium stops elimination and increases decomposition.

7. I do not deny or undervalue opium in any other forms of diarrhœa than the one under discussion.

8. Evacuants are to be considered an essential part of antiseptic treatment.

9. Experience thus far leads me to regard naphthalin and the salts of salicylic acid as the most valuable antiseptics for the intestinal tract. —*Am. Med. Digest.*

CORROSIVE SUBLIMATE IN INTRA-UTERINE IRRIGATION.—Dr. Braun, from recent observations, has arrived at the following conclusions concerning the the use of corrosive sublimate in irrigation of the uterus and vagina: 1. Vaginal or intra-uterine irrigation is frequently followed by absorption of the injected liquid; 2. When this occurs, mercury is quickly detected in the fæces; 3. If the return of the injected liquid be in any way prevented, absorption occurs rapidly; 4. The 1 in 1,000 solution of sublimate should be used only in serious cases, such as tympanites of the uterus, putrefaction of the fœtus in the uterine cavity, or septic puerperal fever. The injection should not occupy more than a minute in the performance, and should be followed by a copious injection of distilled water. 5. The 4 in 1,000 solution should be injected only in cases of expulsion of a macerated fœtus or in endometritis consecutive to the expulsion of the fœtus in premature delivery; 6. This solution may be of service in puerperal endometritis, accompanied by a fœtid vaginal discharge; in these cases irrigation should be followed by an injection of pure water; 7. Irrigation should be performed only by a medical man; 8. Irrigation with corrosive sublimate should seldom be employed in woman suffering from extensive wounds of the vulva, in those who have been taking mercurial preparations, in cases of atony of the uterus, in anæmic women, or in patients suffering from diseases of the kidneys.—*Br. Med. Jour.*

PEPSIN INJECTIONS IN TUMORS.—Dr. W. H. Morse, in the *Med. Register*, reports his use of pepsin in the local treatment of tumors. He used one part of the pepsin to three of distilled water. He writes:

"My results have 'almost always' been uniform, and in referring to the exceptional cases, do not

understand me as having occasion to find fault with the pepsin. The sole reasons for failure have been due to extraneous causes, or when the neighboring lymphatics were involved. Thus in the main, my results have tallied with those of Thiersch, Nussbaum, and Broadbent, and this, both as regards benign and malignant tumors, some of them unmistakably cancerous.

"Reports of cases are, at the best, dull reading, and moreover are more dull to write, therefore I will not burden the busy reader with the details of my note-books. Yet, as to the matter of proof, I will submit something in the way of items.

"1. Recurrent carcinoma, as large as a hen's egg, seated in the right side of the inferior maxilla; suppuration excited by injection, and the tumor diminished to size of a hazelnut.

"2. Another carcinoma, of same size, situated in the right breast of a woman; suppuration after seven injections; and in the course of a month the residuary nodule was scarcely as large as a marrow-fat pea.

"3. A primary carcinoma of the size of a turkey's egg, situated back of the ear of a young man, was treated in the same way to one injection every twelve hours; after twenty-one injections, suppuration took place; ultimately, an entire disappearance of the tumor.

"4. Subcutaneous nævus, angle left eye, child; size of filbert; suppuration avoided only by occasional injections; after four months, reduction complete, save the clot.

"5. Interstitial fibroid of uterus; needle introduced through the vagina; anæsthetic employed; after several injections all accompanying symptoms removed, and the cure was considered complete."—*Med. and Surg. Reporter.*

TREATMENT OF DIPHTHERIA.—Dr. F. B. Drescher (*Weekly Medical Review*) has made use of the following treatment in diphtheria with marked success:

R.—Hydrargyri bichloridi, . . . gr. ½.
Spts. frumenti, ... ℥j.
Syr. simplicis, ... ℥j.—M.
Sig.—Teaspoonful every three hours, night and day.

R.—Liq. ferri subsulphatis, . . ℥ij.
Glycerine, ... ℥ij.—M.
Sig.—Brush the throat once or twice daily.

R.—Tr. ferri chloridi, ... ℥ij.
Potassii chloratis, ... ℥j.
Glycerini, ... ℥iss.
Aquæ cinnamomi, q. s. ad., . ℥iij.—M.
Sig.—Teaspoonful in teaspoonful of water every three hours, night and day.—*Med. Age.*

SCROFULOUS NECK—LOCAL APPLICATIONS.—I take it, that the day of local applications is over. It is no longer a routine measure to paint iodine over the skin of the neck in all cases of cervical gland enlargement. Such painting appears to be of the most use in certain chronic cases where the glands—few in number—have become quite inert, listless, and free from all tenderness. In a large number of instances it does harm, probably by adding to the disturbance already exhisting in the periphery. Suppuration in glands has, I think, been often determined by iodine paint used by lavish hands. In some slow progressing cases, where the glands are not tender and there is no distinct evidence that suppuration exists, a steady rubbing of the part with the ointment of the ioddie of lead appears often to effect considerable improvement. Poultices of seaweed and compresses of salt water do little more than divert the patient and increase his risks of catarrh. In early cases, where the trouble is active and progressing, the use of the cervical splint alone is the most effective of local measures. With its application the parts are placed at rest, the glands cease to be painful, and very commonly cease to increase. The same may be said with reference to chronic enlargements that have become once again the seat of active change.—*Retrospect.*

BICARBONATE OF SODIUM IN THE TREATMENT OF GONORRHŒA.—It is now generally admitted that gonorrhœa is a parasitic affection. Observation seems to prove that the parasite can only exist in an acid medium, and the injection of non-irritant alkalies naturally suggests itself. Before commencing treatment. Dr. Costellan ascertains by means of litmus paper the acidity of the pus—a sure indication of the nature of the affection. He uses a one per cent. solution of bicarbonate of sodium, to be injected three or four times daily. From seven to eight days' treatment is generally sufficient to procure a marked diminution in the quantity of discharge, and convalescence is rapid. The injections at once relieve the scalding which accompanies micturition.—*London Med. Rec.*

W. H. MAY, M.D., New York, says: I have had very successful results in the administration of Bromide in cases having their origin in disorders of the nervous system, such as cholera infantum, paralysis, insomnia, etc. *But I find it to be of special value in the treatment of delirium tremens, and the results of debauch;* it being retained upon the stomach and speedily controlling the most dangerous symptoms, and producing the desired calmness and sleep necessary when morphia and other soporifies have failed to do so, and thus rendering the disorder amenable to further treatment. Have also prescribed it successfully in the terrible state of nervous exhaustion due to opium habitues endeavoring to relinquish the habit. And, finally, as result of experience, I pronounce it the "Hypnotic *par excellence.*"

THE CANADA LANCET.

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TREATMENT OF DIARRHŒA IN CHILDREN.

Now that the warm season is upon us, it may not be inappropriate to review the treatment of diarrhœa, in order to refresh the memory upon the best modes of managing so troublesome and often so fatal a malady. Our limits preclude anything like an exhaustive review, therefore we only attempt to bring out a few principal points which experience has proved most successful. First, then: vigilant attention to the hygienic environment, food, clothing, temperature, etc., is most important. Nothing appertaining to the most favorable and wholesome surroundings attainable must be neglected. Most definite directions must be given to the parents and nurse with regard to the dietary. They must be distinctly impressed with the vital necessity of regular and judicious feeding, flannel clothing, proper attention to the skin, pure air and moderately warm and equable temperature.

Pure boiled milk, in which a little flour is thoroughly cooked, to which a little Tr. Cinnamon or other carminative, and a few drops of good brandy may be added, is simple, easily prepared and unsurpassed as an article of diet in this disease. Many others are useful, such as corn starch, rice, arrowroot, etc., which may be required for variety to suit the capricious taste of the sufferer. The quantity given at one time should be very small, and frequently repeated. Overloading the stomach and intestines is very deleterious. At a later period, especially if these foods pass through the stomach partially or wholly undigested, we have found nothing equal to scraped or finely shredded raw beef. It will be retained on the stomach better than most other foods, and will be digested and absorbed, leaving but small residue of waste material to pass downward and excite the irritable mucous membrane. Many of the extracts of meat and prepared foods are doubtless useful, but we have so far found none equal to raw beef. To alleviate the thirst, boiled milk and lime water, cold, to which some agreeable flavoring extract may be added if desired, fulfils the indications, and is generally grateful to the patient. This must also be given in small quantities and frequently repeated, especially when fever creates excessive thirst, and induces almost continuous applications.

The stools in the beginning are usually frequent, peculiar and offensive. At this period a few powders, composed of Hyd. cum. cret., rhubarb and soda bicarb. answers a good purpose. One dose of calomel sometimes acts like a charm, but when there are indications of scrofula, rickets or tubercle mercury, in any form, is contradicted, nor must it be be continued in any case. Afterwards a mixture, composed of Tr. camph. co., Tr. rhei., Tr. kino. or catechu, carbolic acid and syrup will complete the cure in most cases. When there is much griping and tenesmus with a tendency to dysentery, enemata of starch and laudanum seldom fail to give relief. When the contents of the stomach and bowels indicate acidity, bismuth, chalk, and Dover's powder are useful, and in most cases, especially if persistent, ipecac in small and frequent doses is wonderfully efficacious. In obstinate cases, with a tendency to become chronic, oxide of zinc, nitrate of silver, arsenic, veratrum album, nux-vomica and corrosive sublimate each has its advocates, and are all very useful in properly selected cases. An innumerable array of other remedies have been advocated and successfully employed in many instances, to which space will not permit us to allude. But we have had more success in chronic cases which have resisted ordinary remedies, by stopping the use of all drugs, except perhaps pulv. ipecac co., to allay pain and give rest, and relying upon raw beef, with wine whey (when very much exhausted) for drink. What is

needed in these cases is nourishment, and not drugs, and beef in this condition appears to supply the want better than anything else with which we are acquainted. Even very young infants, with irritable stomachs will retain, digest and absorb this, and in most instance, evince a desire for renewed supply, when almost everything else fails.

We do not underate the value of change of air, going from the city to the country, from unwholesome to wholesome surroundings, flannel bandages around the abdomen, etc., etc., but unless sufficient nourishment can be supplied to the system, all is in vain. All have frequently seen in this disease, the child with a voracious apetite, swallowing more food than a healthy child, suffering from actual starvation, from almost absolute indigestion, the diarrhœa kept up by irritation, caused by the passage of this food through the bowels. In this case digestible nourishment is the *sine qua non*, and raw beef sprinkled with a little lactopeptine, the specific. Others may have found something of more utility than this, but we have failed to do so. The various germicides may prove more effective remedies in future, than those mentioned, but sufficient time has not elapsed at present, to satisfactorily establish their superior utility, and therefore we must be permitted to retain the established remedies till the recent ones have been proved more successful.

AMERICAN GRADUATES IN CANADA.

The question of reciprocity in the matter of medical degrees in the United States and Canada, was to have been taken up, says the Chicago *Inter-Ocean*, by the American Medical Association which met recently at Chicago. The fact that "the Canadian schools, and notably those of Ontario, ignore the degrees of all other universities conferring medical degrees, whether in Europe or America," is considered a grievance.

If it had said "Councils" instead "of schools" the above would have been more correct, as the schools, of course, have nothing to do with the licensing of practitioners. It is further stated that "while the Canadian graduate is courteously received in the United States, his degree recognized by the Boards of Health there, and his status unquestioned by the medical societies, in Canada the graduate of schools of medicine, certainly in no way the inferior of their best institutions," is not allowed to practise because he has not fulfilled the supposed vexatious requirements which entitle him to be registered in Canada. Now, a kindly and fraternal feeling between the medical men of the United States and Canada is greatly to be desired, and none know better than Canadians the advantages we derive from the great schools and hospitals of our neighbors as well as from their medical literature and advances in the science of medicine, for which they have been famous. But unfortunately, there are schools and degree-granting institutions in the United States which are simply a disgrace to that country. This is readily admitted by all the best men on both sides of the line. Now, free trade would be all very well if we could permit only the men whose education is up to the modern standard to come among us, but how draw the line? We certainly do not wish our country flooded with "wild-cat" degrees from the Western States, nor yet with bogus medical diplomas like those which were lately "sold by the hundred at Philadelphia," and so the only recourse we have is to shut out all. We do not consider our medical institutions better than, nor even as good as, the great schools of our neighbors, but we do hold they are better than the vast majority of institutions there which have the power to grant degrees in medicine.

When, however, the *Inter Ocean* put the case of European licentiates being excluded, and especially by Ontario, it was right as to the injustice of such exclusion.

What reason our Council in Ontario can advance for keeping out British licentiates we are not able to surmise, unless, indeed, it be solely for the sake of fees paid for Council examinations. We would like an expression of the feeling of the medical men of Canada, on this latter point, for we can but think that the concensus of opinion would be to allow all British licentiates to register here; especially since similar action has lately been taken in England, admitting our licentiates to registration there. The matter was under discussion at the meeting of the Council last week, but as shown by the report in another column it has been referred to a special committee which will report next year, and in the meantime British licentiates will not be permitted to register. We would say to the Ontario Medical Council, protect

us to the fullest extent from quacks and the holders of worthless degrees, but do not make us appear ridiculous in the eyes of the medical world at large.

ONTARIO MEDICAL COUNCIL.

The late meeting of the Ontario Medical Council opened under the presidency of Dr. H. H. Wright, on June 14th. One of the first matters discussed was, the question of raising the standard of matriculation. Nothing definite was, however, elicited, but it was thought that the Council would work harmoniously with the Minister of Education in the direction of raising the standard. This movement is not too early. It is a fact much to be regretted, but none the less a fact, that many of our students come up for their professional education with an extremely narrow field, as far as literary or scientific education is concerned. Let us hope that a new era is about to dawn in this respect, and that while the change may not be too sweeping, it may be sufficient to ensure that medical students shall possess at least a fair general education, in the present meaning of that term, before they shall be allowed to commence their professional work.

Dr. Edward's amendment, as given in another column, was of importance, especially we think, as to the last clause. At the last Council examination, students were in attendance up to 10 and 11 o'clock at night, and of course the examiners were worn out, perhaps cross, for they are human after all, and perhaps also not just in that frame of mind necessary to decide upon the fate of the poor candidate who had to hunt up well worn arteries and nerves by artificial light. However that was, there was much dissatisfaction expressed by those students who came in late at night, and while we know that if a student can not grumble at one thing he will at another, we think Dr. Edward's motion timely. Dr. Burns' idea of insisting on a clinical examination, is certainly in the right line. It will take more time, and add somewhat to the expense, but nothing can be considered too great a sacrifice which adds to the practicalness of our examinations. We hope to see this matter carried through.

The Committee of Discipline, following the late amendment of the Medical Act, was struck. We congratulate the gentlemen, as also the profession at large, on their appointment, but we do not envy them. The examiners for next year are all well-known men, and will no doubt be satisfactory to all concerned. It is gratifying to know that the financial condition of the Council is on so sound a basis.

ONTARIO MEDICAL ASSOCIATION.

The late meeting of the Ontario Medical Association was undoubtedly the most successful which has been held by this body since its organization. The number of members attending was greater than ever before, and the general interest of the meeting was increased by the presence of several distinguished visitors and delegates from the different States. Many of the papers read were excellent, and the discussions on them full of interest to all present. We need not say anything further as to the papers presented, as they will appear from time to time in this Journal; but we would like to enter a protest against the *cacœthes loquendi*, displayed by some of the members, who talked apparently for the simple purpose of hearing themselves talk, and took up time with unimportant matter, which might have been more profitably spent in other ways. Some speakers seemed to forget that they were speaking to educated men, and not to students. When we speak of unimportant matter, we do not wish it to be understood that we mean plain, simple, every-day work from which principles may be evolved. Thus, we believe, that the understanding of so simple a matter as the use and abuse of poultices, so clearly put by Dr. Gerster, of New York, is more important than a discussion on, say, peri-typhlitis, albeit the latter name may sound more grand when well rolled on the tongue. But we do think that simple cases, mentioned one after another, with nothing out of the ordinary in them, and leading up to nothing, should be characterized as unimportant, and that the only object the speaker has, is to talk, and to let it be known that he has had cases.

The President, by his uniformly courteous manner, and the great interest he took in the various discussions, as well as by his sound arguments and practical suggestions, did much to augment the interest of the meeting.

The appointment of an Advisory Committee, to whom questions as to malpractice may be referred, will have a good effect. Under its advice a practitioner will enter the field against his opponent with a recognized backing, which will go far towards improving his case. We think Dr. Henderson deserves the thanks of the profession at large, for the energy and zeal he has shown in this matter. The number of papers was too great for all to be heard, and we have no doubt that much good matter was thus crowded out. The election of officers seems to have been generally acceptable, and especially that of the President, Dr. Rosebrugh, of Hamilton, who has always shown great interest in the welfare of the Association, and under whose care it will doubtless be sure of a good meeting next year.

CHLORAL IN LABOR.—A correspondent of the *Medical Age* says: For a great many years I have been using hydrate of chloral in cases of labor, with remarkable results. When I am called to attend a woman in labor, and find the os undilated or rigid, I invariably inject into the rectum 30 grains of hydrate of chloral dissolved in about four ounces of warm water, with a little starch added. I have used this means for such cases for eight years, and have failed to get any but the most flattering results; in fact, I can not prize the method too highly. On the 28th of this month, I was called to a case of placenta prævia; the woman had been flowing all night, and when I got there, at 6 o'clock, a.m., she had lost much blood. I found the os rigid and undilated. I immediately injected my favorite remedy, and in less than three minutes the os was dilated so that I could readily pass my hand into the uterus, and the rectum, vagina and perineum were well relaxed. The drug has never failed me yet in this connection, and I would like to commend it to others who may not have used it.

BRITISH DIPLOMAS.—The following Canadians have received the L.C.R.S. Ed., and L.F.P. and S. Glasgow: D. Thompson, F. M. Brown, A. B. Thompson and C. A. McBride.

There was an extra pass or final examination held on 17th June, for the L.R.C.P. London and the M.R.C.S. Eng. This was to allow candidates to have an opportunity of obtaining the diploma and registering before the new Medical Act came into force (30th June).

EUCALYPTOL IN PHTHISIS.—The *Med. Press* says, M. Ball communicated to the Academie the result of his observations relative to the treatment of phthisis by subcutaneous injections of eucalyptol. This new treatment, commenced by M. Roussel, was variously tried, and with some good results. Out of 21 patients, 6 died, 10 were much improved, and 5 are still under treatment. The agent acts as an antiseptic, diminishes the sweating, diarrhœa, expectoration, and fever. The eucalyptus is dissolved in four times its volume of olive oil, and of this a full hypodermic syringe is injected over the hip. An intelligent chemist at Paris, called Lebrun, has produced a solution which he styles eucalyptine, to be used for the same purpose. It is much more convenient, as it requires no preparation. From a half to a whole syringeful is injected twice or three times a week, or even every day, until the patient exhales by the breath the odour of the substance. Favorable reports have been made on it.

INEQUALITY OF PUPILS IN HEALTH.—Ivanoff (*Vratch*) came to the following conclusions, from the examination of one hundred and thirty-four healthy recruits: 1. Equal or symmetrical pupils, as well as equal or symmetrical halves of the face, are met with but very seldom, the former only in nine per cent. of the persons examined, and the latter only in 2.2 per cent. 2. That inequality or asymmetry is probably dependent upon an asymmetrical development of the cerebral hemisphere. 3. In 54.5 per cent. of persons, the left pupil, and in 73.9 per cent. the left side of the face, is larger than the right one.

SWALLOWING ARTIFICIAL TEETH.—A writer in the *Brit. Med. Jour.* mentions a case in which he successfully got rid of the foreign body, a gold plate with two teeth, by a plan recommended by Sir James Paget. The patient was made to eat three large slices of bread, and swallow four tablespoonfuls of flour and water, mixed into a thick mass. An emetic was then administered, and the plate and teeth were vomited, entangled in the tenacious contents of the stomach.

DYSPHAGIA OF PHARYNGEAL PHTHISIS.—This

distressing symptom has been (*Lancet*) relieved by Mr. Lennox Browne, by first scraping the diseased surface—after having applied cocaine—and then touching it with a strong solution of lactic acid (20 to 60 per cent.) daily. At the end of three weeks the dysphagia was entirely relieved.

ATTEMPT TO REMOVE A NEEDLE FROM THE HEART.—In the *Brit. Med. Jour.* is a report of the following case from the recent German Surgical Congress: A student of the Polytechnic School had endeavored to kill himself by driving a needle into his heart Though the needle entered the heart, the attempt failed. The needle could be distinctly felt. The pericardium was opened, but the needle was not found; a second operation was undertaken, and the operator was successful in seizing the needle, but failed to extract it, so that it slipped completely into the heart, where it could be felt. The operation having been abandoned at this stage, the patient made a good recovery.

DIET IN BRIGHT'S DISEASE.—J. Milner Fothergill gives (*Journal of Reconstructives*) the following for a patient with Bright's disease:

Breakfast: Oatmeal or hominy porridge, hominy fritters, followed by a little fish with plenty of butter to it; or a slice of fat bacon or pork. Fat, fish or farinaceous matters. Hominy and fat pork for the less affluent.

Lunch or supper: Mashed potatoes well buttered. Other vegetables well buttered. A milk pudding made without an egg. Biscuits of various kinds and butter, with a nip of rich cheese.

Dinner: Soup, containing plenty of vegetable matter, broken biscuit, or sago, or vermecilli. Cream in lieu of so much strong stock should lurk in the soup tureen; especially in white soup. This should be followed by fish in some form; a course of vegetables, as stewed celery, chopped carrots, a boiled onion, leeks, nicely prepared potatoes, as "browned potatoes," a la Marion Harland, asparagus. or "scalloped tomatoes" and corn or "boiled corn." Then should follow apple-bread pudding, Maud's pudding, bread and raisin pudding: and, if the digestion can be trusted, roly-poly pudding, sweet pudding and fruit pies. Stewed fruit, with creeled rice, rice milk or other milk pudding is good, or better still, cream. Then comes the biscuit, or crackers and butter. Dessert with its many fruits should never be omitted.

MORPHIA MANIA.—M. Ball (*Gaz. des Hospitaux*) gives the following directions for treating patients with morphia mania:

1st. Place the patient in a private hospital, where the indispensable surveillance of a physician can be exercised every moment.

2nd. Suppress more or less completely the use of morphia.

3rd. Relieve the action of the heart by timely injections of sparteine, to which morphia should be joined if the accidents become too menacing.

FEHLING TEST TABLETS. — These have been known to indicate the presence of sugar when none existed in the urine (*Druggist's Circular*). It is claimed that this error is brought about by the substitution by some manufacturers, of the alkaline carbonate of potash, which is said to be more effective in preserving the peculiar blue color of the tablets.

PRICKLY HEAT.—A writer in the *St. Louis Med. and Surg. Jour.* says a two per cent. solution of sulphate of copper applied to the skin and allowed to dry on will cure in a few days. It should be used night and morning.

IMPROVED COMPOUND LICORICE POWDER.—Dr. Oxley referring (*Lancet*) to the severe griping sometimes produced in young patients by the administration of the Pulv. Glyc. Co. of the B. P. suggests as an improvement the following formula: Senna and liquorice-root, of each 2 parts; anise fruit and sulphur, of each 1 part; sugar, $5\frac{3}{4}$ parts; ginger, $\frac{1}{4}$ part. He says, "this altered preparation is quite as satisfactory in its laxative properties, is less liable to gripe and is as pleasant to take as the officinal powder," and suggests its trial in cases where the original produces unpleasant effects.

DIPHTHERIA HOSPITAL.—A movement is on foot to establish a Diphtheria Hospital in New York. The scheme has the approval of the profession in that city. A special ambulance is to be provided for the conveyance of the patients from their homes to the hospital.

THE PROFESSION IN GERMANY.—A warning has been issued at Berlin, (*Med. Press*), and sent by

the Medical Union to all directors of gymnasiums and classical schools, calling attention to the overcrowding of the medical profession in Germany. In 1885–6, the number of matriculants reached 7,781.

REMEDY FOR ITCHING PILES.—The *Chicago Med. Times* gives the following:

℞.—Tinct. capsicum, ... 1 part.
Spts. turpentine, ... 2 parts.
Spts. camphor, ... 3 "
Decolorized iodine, ... 3 " —M.

RINGWORM.—Dr. Maddox says (*Med. Brief*), that one or two applications of the following will cure the above.

℞.—Hyd. bichlor. . . . . gr. x.
Alcohol, ... ℥j.
Ol. Sassafras, ... ʒ j.—M.

SALICYLIC ACID AND IRON IN RHEUMATISM.—A correspondent kindly draws our attention to the fact, that the formula given in our last number, will not produce a clear mixture, and proposes the following:

℞ Ac. salycil., ... gr. xx.
Sod. phosph. (crystal), . . gr. xl.
Fer. pyrophosphi, . . . gr. v.
Aq. ad., ... ℥ ss. M.

LOTION FOR STYE.—Mr. Abadil (*Med. Press*) gives the following:

℞ Acidi boracic., ... 1 part.
Aquæ dest., ... 30 parts.
Solve.

S.—With a wetted piece of wadding, drop some of this solution on the stye several times a day. It is said not only to effect a cure, but to prevent a return of the annoyance.

THE following is recommended in cystitis:

℞ Acidi benzoici, ...
Sod. biborat., ... *aa* gr. x.
Infus. buchu, ... ℥ ij. M.

S.—Three or four times a day.

SPRAY FOR NASAL CATARRH (Sajous):

℞.—Sodii bicarb.
Sodii biborat. . . . . āā gr. iij.
Aq, ... ℥ j.—M.

Sig.—Use as a spray.

FOR ERYSIPELAS.—Prof. Da Costa speaks highly (*Med. Rec.*) of pilocarpine in this affection. He advises ⅛ to ⅙ gr. of pilocarpine, or 20 minims of the fluid extract of pilocarpus as a dose. Local applications are not of much use.

A VERMIFUGE POWDER.—Dr. Reymond in *Jour. dé Medicine*, gives the following:

℞.—Calomel, ... gr. 2¼.
Santonine, ... gr. 1½.
Sacch. lact. . . . . gr. xv—M.

S.—In the morning, in honey, on an empty stomach for a child of 4 years.

CANADIAN MEDICAL ASSOCIATION.—The next Annual Meeting of the Canadian Medical Association will be held at Hamilton, August 31 and September 1, 1887.

BRITISH MEDICAL ASSOCIATION.—The next Annual Meeting of this Association, under the presidency of Dr. Withers Moore, will be held at Dublin, on the 2nd, 3rd, 4th and 5th August, 1887.

IT is said that small doses of ergot added to the mixture, will prevent the unpleasant ear symptoms caused by full doses of quinine or salicylate of sodium.

CHARCOAL is said (*Australasian Jour. Pharm.*) to be an antidote to strychnia poisoning. It should be given in water.

QUINSY.—Dr. Easly says (*Lancet*) that 10 to 15 gr. doses of salicylate of sodium every two hours, invariably gives relief.

The *Med. Record* recommends the following for a crying, peevish, irritable infant:

℞ Sodii bromid., ... gr. v.
Mist. assafœtidæ, ... ℥ i M.

Sig.—℥i *p. r. n.*

GREASES pots are best removed by a mixture of equal parts of strong ammonia, ether and alcohol. Place a piece of blotting paper under the grease spot, moisten a sponge first with water to render it "greedy," then wet with the mixture, and rub with it the spot.

"BAKED BEANS" is the title of a trochure laid on our table. Its theory is all right (says the *Am. Med. Jour.*) but we prefer Bergeon's method.

Dr. Joseph Bell, of Edinburgh has been presented with a portrait of himself by a number of students and admirers. His connection with the acting staff of the Infirmary ceased some months ago.

Dr. Ashurst recently appointed surgeon-in-chief to the Pennsysvania Hospital, is likely, says the *St. Joseph Med. Herald*, to cause trouble by attempting to abolish antisepsis in the wards of that hospital.

Mrs. Octavius Weld, of London, Ont., has passed the Soc. of Apothecaries of London, Eng., and received a licence to practise Medicine, Surgery and Midwifery.

We beg to call attention to the advertisement of Morel's apparatus for gaseous enemata, with its improvement by Reichardt & Co., of New York.

The exhibit made by Martin, Toms & Co., of Toronto, of surgical appliances, etc., at the late Ontario Medical Association, was exceptionally good.

James Alexander Grant. M.D., of Ottawa, has been made a companion of St. Michael and St. George.

Dr. Austin Flint has been appointed visiting physician to Bellevue, in place of the late Austin Flint, sr.

It is said that Prof. Billroth is convalescent.

Books and Pamphlets.

Stricture of the Urethra; its Diagnosis and Treatment, with original wood engravings, by E. Distin-Maddick, F. R. C. S., Ed., late Surgeon Royal Navy. London. Balliére, Tisdale & Cox. 1887.

The author has struck out a new line as to the cause and treatment of that *bête noir* to the surgeon, stricture. He believes that intractable stricture "with scarcely an exception" arises from one or more of the following causes. First, from a want of manipulatory practice in the use of instruments on the part of the surgeon. Secondly, from the improper and unnecessary use of instruments, and by the employment of unpardonable violence when attempting to pass them through the stricture, by surgeons otherwise possessed of skill and prudence. Thirdly, from the grossest neglect on the patients part."

The work bears evidence of careful thought on the part of the writer, and if he sometimes goes too far in condemning the vast majority of these who treat stricture as no better than bunglers and in intimating that the majority of patients would be better without any treatment than that which they receive, his cautions will, we have no doubt, exert a good influence on those who are too ready to treat stricture with instruments. The work is well worthy of persual.

Refraction of the Eye; its Diagnosis and the Correction of its Errors. By A. Stamford Morton, M.B., F.R.C.S. Ed., Surgeon to the Royal South London Hospital, etc. Philadelphia: P. Blakiston, Son & Co., 1886; pp. 67.

This will be found a useful little book for beginners, and, indeed to all those who habitually use the ophthalmoscope in practice. The definitions and explanations are clear and concise, and altogether the work is such as can be recommended to those requiring the greatest amount of information and help, at the cost of the least expenditure of time and labor.

Evacuant Medicines. By Henry M. Field, M.D., Professor of Therapeutics, Dartmouth Medical College, etc., etc. Philadelphia: P. S. Blakiston, Son & Co., 1887; pp. 288 $1.75.

This is a new departure in medical literature, it being, according to the author, the only treatise on the subject extant. Perhaps no agents in the whole range of therapeutics are more frequently called into requisition than are cathartics, so that a careful and practical study of the individual action, application, and contra-indications of the more important of them will be read with interest by everyone engaged in practice. The portion of the work devoted to emetics is well and scientifically written, so that we have no doubt the work will be found useful to any who desire to study the subjects of catharsis and emesis.

Earth as a Topical Application in Surgery. By Addinell Hewson, M.D. Philadelphia: The Medical Register Co. 1887; pp. 309.

PRACTITIONER'S HANDBOOK OF DISEASES OF THE EAR AND NASO-PHARYNX. By H. Macnaughton Jones, M.D., M.Ch. London: J. & A. Churchill. 1887; pp. 176.

This work will be found to contain a clear and concise exposition of the important diseases of the ear. It is not an exhaustive treatise in aural surgery, but it contains clear and concise rules for practice, with hints as to treatment of the most common diseases of the ear, met with in every-day work, which will, we are sure, be very acceptable to the general practitioner. The work is profusely illustrated

ELEMENTARY MICROSCOPICAL TECHNOLOGY. A Manual for Students of Microscopy, in Three Parts. Part 1. By Francis L. James, P.L.D., M.D. St. Louis: The St. Louis Medical and Surgical Journal Co.

This work will be of great use to students in microscopy. The author pre-supposes no acquaintance with the subject on the part of the learner, and each step of the work, each step and manipulation is explained in orderly sequence. Parts 2 and 3 will appear in due time.

ANÆMIA. By Fredrerick P. Henry, M.D., Prof. of Clinical Medicine, in the Philadelphia *Polyclinic*, etc. Reprinted from the *Polyclinic*. Philadelphia: P. Blackiston, Son & Co. 1887. pp. 134. 75c.

A usful little book, dealing with the subject in a concise and lucid manner.

THE VEST POCKET ANATOMIST. By C. Henri Leonard, A.M., M.D., Professor of Diseases of Women, Detroit College of Medicine, etc. 13th revised edition, with plates. Detroit: The Illustrated Medical Journal Co.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN PHYSICIANS. First Session. Washington, June, 1886. Vol. 1.

WYTHES' POCKET DOSE BOOK. Philadelphia: P. Blakiston, Son & Co., 1887. 17th Edition.

A STEP IN THE REFORM OF ENGLISH SPELLING.—Professor Skeat, in a recent number of *Notes and Queries*, says:

"Those who know the whole history of our spelling from the eighth century to the present time, best understand the harm done by the pernicious system of trying to transplant Latin and Greek symbols into the English language. The symbols æ and œ are not English, and are best avoided. Indeed, this is done in practice when once a word becomes common. *Æther* and *ætherial* have been sensibly replaced by *ether* and *etherial*. No one writes *æternal*. *Solœcism* is now *solecism*, and I trust *primeval* and *medieval* will soon prevail over *primæval* and *mediæval*. Pedantic spellings are most objectionable, because they are useless and unphonetic."

We heartily agree with Proffessor Skeat, and trust that *diarrhœa*, *leucorrhœa*, *dysmenorrhœa*, etc., will soon give place to *diarrhea*, *leucorrhea*, *dysmenorrhea*, etc.

The above is from the *British Medical Journal*. To be consistent, however, the *Journal* must also use *edema*, *fetus*, *Cesarean*, etc. The characters æ and œ are not English, and should not be tolerated in anglicised words.—*Col. Med. Jour.*

AN ALLEGED INSTANCE OF REMARKABLE FECUNDITY.—A correspondent sends us an extract from a book giving the history of a journey to Saragossa, Barcelona, and Valencia, in the year 1585, by Philip II, of Spain. The book was written by Henrique Cock, who accompanied Philip as his private secretary. On page 248 the following statements are to be found: At the age of eleven years, Marparita Goncalez, whose father was a Biscayian, and whose mother was French, was married to her first husband, who was forty years old. By him she had seventy-eight boys and seven girls. He died thirteen years after the marriage, and, after remaining a widow two years, the woman married again. By her second husband, Thomas Ochoa, she had sixty-six boys and seven girls. These children were all born in Valencia, between the fifteenth and thirty-fifth years of the mother's age, and at the time when the account was written she was thirty-five years old and pregnant again. Of the children, forty-seven by the first husband and fifty-two by the second were baptized; the other births were still or premature. There were thirty-three confinements in all.—*N. Y. Med. Jour.*

ERGOT has been found very useful in the diarrhœa of phthisis, as well as in the night sweats of that disease.

Births, Marriages and Deaths.

At Tilsonburg, on 3rd June, Dr. Bart. B. Patullo, aged 28 years.

In New York, June 3rd, Dr. Geo. H. Shaver, of Islington, Ont.

At Prescott, on 1st June, Dr. George C. Hart, aged 33 years.

THE CANADA LANCET.

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Original Communications.

THE RELATION OF THE ASEPTIC AND ANTISEPTIC METHOD TO THE TREATMENT OF THE LESIONS OF SYPHILIS.*

BY DR. GERSTER, NEW YORK.

I. *Aseptic Treatment of Primary Induration.*

The nature of the specific virus of syphilis is not known. In most cases its local and general manifestations are amenable to appropriate systemic and topical remedies.

It is not intended here to dwell upon the nature and treatment of syphilis as a general disease, only inasmuch as some of its more common local phenomena require surgical treatment will their consideration be deemed within the limits of this paper.

The anatomical structure of the primary induration, of tuberous syphilides, and of gummy swellings, resembles closely that of recent tuberculous deposits; and their course of development and termination in central coagulation necrosis, fatty changes, or caseation, also bears much resemblance to the affections caused by the bacillus of tuberculosis.

As long as softened syphilitic foci remain subcutaneous and are not expcsed to the influence of the air and its pus-generating germs, their course is bland and slow, and their tendency is to fatty degeneration, encapsulation, and final absorption. But as soon as a softening syphilitic deposit comes under the influence of the pyogenic elements contained in the atmospheric air, its slow and bland character is changed to a most destructive one. Thus syphilitic nodes of the internal organs, being protected from contact with the outer air, rarely, if ever, terminate in ulcerative destruction; they generally tend to fatty involution, absorption, and cicatrization. Specific deposits of the outer skin, the mucous membranes—as, for example, of the nasal and oral ones, on the other hand, are all noted for their pronounced tendency to rapid ulceration or gangrenous destruction.

The explanation of this peculiar difference in the behavior of indurations or tumors essentially identical in morbid character, is to be found in the fact that the poor nutrition and low vitality of the cellular elements composing a primary or secondary syphilitic node, exposed to pyogenic infection by contact with the outer air, offers very favorable conditions for the rapid development and destructive multiplication of germs that are notoriously deleterious even to healthy tissues exposed to them. Pus-generating cocci deposited on the excoriated surface of a syphilitic focus, as, for instance, a primary induration of the prepuce, or a gummy swelling of the nasal bones, will, by their multiplication, lead to massive invasion and rapid ulcerative destruction of the densely infiltrated and poorly nourished node.

Syphilitic ulcers of every kind present a combination of syphilitic and of pyogenic infection.

If we succeed by appropriate systemic treatment in preventing the extension of the central softening of a syphilitic node to the surface, ulcerative changes will also thus be prevented. For example: The timely administration of large doses of iodide of potash may prevent necrosis of the nasal bones, which are the seat of a growing, gummy swelling. Their dense infiltration pertains to syphilis; their necrosis, however, is caused by the invasion of pyogenic germs. But we possess another means for preventing ulcerative destruction of syphilitic deposits located in the outer skin. They are more exposed to pyogenic infection, but they are also more accesible to local remedies.

The aseptic protection of the surface of the primary induration offers an easy remedy for preventing the formation of the primary ulcer or chancre.

True, that the prevention of the ulcerative destruction of a primary induration of the prepuce will not prevent the systemic development of syphilis; but it will, nevertheless, constitute a

* Read before the Ont. Med. Association, June, 1887.

valuable service rendered to the patient, who will be spared all the suffering, annoyance, and danger connected with the development of the primary ulcer.

If a patient, exhibiting a recent primary induration of the penis, presents himself for treatment before the appearance of the pustular excoriation, or before the epidermal film of the formed pustule is broken, and if the surgeon thoroughly cleanses and disinfects the affected parts, afterwards carefully enveloping the penis in an aseptic dry dressing, ulceration of the indurated node—that is, the development of a primary ulcer—can be effectually prevented.

The node will loose its epidermidal covering, but the aseptic dressing will exclude pyogenic infection, and the course of development and involution of the syphilitic deposit will be as though it were subcutaneous. A small quantity of lymph will exude from the excoriated surface, will be imbibed by the aseptic dressing, and will exsiccate—thus forming a hermetic seal and protection to the diseased tissues.

Fatty disintergration of the infiltrated tissues will be followed by the formation of new epidermis, and when, after three or four weeks, the dressings come off, a cicatrized, though still somewhat indurated portion of skin will be exposed to view.

Specific rash, and other manifestations of systemic infection, will appear in due course of time; but the incalculable extension of the ulceration to adjoining non-filtrated parts of the skin, and the formation of suppurative buboes and other complications will be obviated. The following case may serve as an illustration :—

Case H. B., aged 25, presented himself Jan. 2nd, 1887, with a hard, elevated node, the size of a nickel, occupying the dorsum penis, and another smaller induration near the frenulum. Suspicious cohabitation had been indulged in for some time until within a few days of the visit. Bilateral indolent inguinal lymphadenitis was noted, and the presence of specific infection was assumed. The patient was kept under daily observation, and was directed not to meddle with any blister that might appear on the indurated spots. Jan. 8th.—A yellow discoloration was observed occupying the appex of the larger node, and was looked upon as an indication that a pustule was forming. The entire penis was carefully cleansed with green soap and warm water, and was disinfected with a 1:100 solution of corrosive sublimate, good care being taken not to break the transparent layer of epidermis covering the discolored spot. A thick layer of iodioform powder was sprinkled over both indurated nodes, and a small patch of iodoformized gauze was placed over them—this being held down by a narrow, oblong compress of corrossive sublimate gauze, snugly bandaged on with a muslin roller. The meatus was exposed for micturition, and the patient was directed not to interfere with the dressings, and to report daily. The first dressing remained undisturbed until Jan. 17th, when its external part, getting disarranged, was removed. The strip of iodoform gauze was found firmly attached to the underlying indurated nodes, and had the appearance of a hard, flat cake, that had been evidently soaked through by lymph or serum some time since its application. Evaporation of its aqueous contents had converted it to the shape just described. It was left *in situ*, and a fresh outer dressing was applied.

At the same date (Jan. 17th), the girl with whom the patient had held commerce, presented herself for examination, at the author's request, and was found to be covered with a small papulous specific rash. The appearance of her throat, the universal adenitis, and two freshly cicatrized spots on the labia minora, left no doubt of her being subject to florid syphilis. She remained under prolonged specific treatment, and in May, 1887, still exhibited pharyngeal ulcerations.

Jan. 25th.—The dressings applied to the patient's penis became again deranged, and had to be renewed. The immediate covering of the nodes, consisting of iodoform gauze, was still firmly adherent, and was left unchanged.

Feb. 12th.—A general malculous rash appeared on the patient's body, and systematic treatment by mercurial inunctions was commenced.

Feb. 20th.—The entire dressings came off the strip of iodoform gauze in the shape of a perfectly dry scab, to the inner side of which was found attached a patch of shiny scales, consisting of effete epidermis. The nodes, which were formerly prominent, had receded to the level of the surrounding skin, and the induration, which still could be felt, was marked by a coat of fresh-looking young epidermis. The patient received fifty inunctions of blue ointment, which freed

him from all cutaneous symptoms of the disease. In May, pharyngeal ulcerations appearing, the inunctions were resumed. The size and hardness of the initial sclerosis were visibly diminished by this time.

It seems in the foregoing case that the ulcerative destruction of the primary induration was forestalled by disinfection, and subsequent aseptic management. Without them the imminent formation of an initial sore would have inevitably occurred. The treatment of the fully developed chancre would certainly have been a much more disagreeable, painful and filthly experience than the simple manipulation of once cleansing and protecting the initial induration. The site of morbid process thus protected against "external irritation," that is, pyogenic infection, ran, as it were, a subcutaneous and bland course of slow involution, the aggregate of discharge during forty-three days not exceeding the small quantity required to permeate a strip of four layers of iodoformized gauze, covering an area of about two-thirds of a square inch.

II. *Antiseptic Treatment of the Primary Syphilitic Ulcer.*

The results obtained by the various time honored and well-established forms of local treatment of the primary syphilitic ulcer, all bear out the assumption that the specific alteration of the affected tissues only serve as a predisposing condition to the subsequent ulcerative destruction of the initial sclerosis. The ulceration is directly produced by the engrafting of purulent infection on a soil that has been devitalized by the dense cellular infiltration characteristic of initial sclerosis. The rapid destruction observed in chancre is always signalized by the detachment of the epidermis raised in the shape of a pustule, under which we find a yellowish, brittle necrobiotic nucleus, which is the first to succumb to the onslaught of the pyogenic organism, deposited on it by the manipulations of the patient or otherwise.

The various forms of local treatment successfully employed for the cure of chancre are all antiseptic in character.

Their aim is either the prompt removal of the infections discharged by prolonged baths and frequent moist dressings, or disinfection by weak or concentrated caustics, or a combination of measures directed towards a rapid removal of the deleterious secretions with chemical disinfection. As the most powerful and most effective arrester of the destructive course of phagædenic chancre, the actual cautery is to be mentioned the sovereign destroyer of all microbial parasites.

(*a*) *Chemical sterilization and surface drainage by medicated, moist dressings.*

The energy to be applied to the local treatment of an ulcerating initial sclerosis should be proportionate to the virulence and destructiveness of the morbid process. In most cases the resistance of the vital forces combating the morbid process would be sufficient to check the damage. This is attested by the numerous cases of neglected chancre that end ultimately in spontaneous cure. Hence, in most instances, a mild treatment by local antiseptic baths, combined with moist antiseptic dressings, will be found sufficient.

Frequent removal of the soiled dressings forms the most essential part of this plan of therapy. The patient is directed to provide himself with a wide-mouthed one-ounce vial, which is filled with suitably proportioned small square pieces of lint or gauze, over which is poured a moderate quantity of a one per cent. solution of carbolic acid, or a 1 : 5000 solution of corrosive sublimate. The cork-stoppered vial can be easily carried by the patient, who is enjoined to dress the sore or sores at least once every hour, and oftener, if the discharge be very profuse. In the morning and evening a prolonged local bath in the same solution is advisable. In many cases this plan will be sufficient to check the extension of the ulcer, and to bring about cleansing of its bottom.

Another mild form of antiseptic treatment consists of the application of iodoform powder to the ulcerating surface. The objectionable odor of the drug can be excellently masked by the admixture of equal parts of freshly roasted and ground coffee. As soon as the appearance of a cicatricial border is apparent, these modes of treatment should be abandoned in favor of the application of strips of mercurial plaster, which should be renewed in proportion to the amount of discharge. Cicatrization will be very much hastened by this change.

(*b*) *Chemical sterilization by strong caustics.*

Cases of greater virulence which do not yield

within a fortnight or so to the mild plan of treatment by scrupulous cleansing and disinfection, or in which rapid extension of the ulcer does not justify temporizing, require the application of escharotics. The author has found a 50 per cent. solution of chloride of zinc the most convenient and most effective of all chemicals recommended for the cauterization of chancre. Its application is to be done as follows:—The ulcer and its vicinity are subjected to a careful cleansing, by a mop of cotton dipped in a 1 : 1000 solution of corrosive sublimate. Crusts and scabs overlapping the edge of the sore must be gently removed. A small piece of clean blotting-paper is applied to the ulcer and its vicinity with gentle pressure to remove all moisture. A moderate quantity of the caustic solution is applied to the sore with a glass rod or matchstick, care being taken not to corrode unnecessarily the surrounding healthy skin. Previous thorough drying of the integument with blotting-paper will best prevent overflowing of the caustic. All the nooks and indentations of the margin of the ulcer must be carefully covered by the solution. As soon as the base of the sore assumes the color of parchment, which will occur in from three to five minutes, cauterization is completed, whereupon the surplus of caustic should be removed by the application of another piece of blotting-paper. The eschar is dusted with a little iodoform coffee powder, and is protected from injury by strip a of moist lint or gauze.

If the cauterization was sufficient, further extension of the ulcerative process will be arrested thereby. In from two to six days, according to the depth of the eschar, a narrow line of demarcation will appear, and the eschar being detached, a healthy granulating surface will become visible. This should be dressed with strips of mercurial plaster until cicatrization is completed.

Insufficient chemical cauterization will not check the ulcerative decay of the tissues. In proportion to the incompleteness of the application, partial or total extension of the ulcer will be observed. In some cases only a tongue of renewed ulceration will be seen extending outward from the margin of the eschar. In others, the ulceration will spread all around the cauterized patch, thus demonstrating the entire inadequacy of the application. The surgeon's error should be in favor of too much rather than too little of the caustic.

When the process is found to be extending more or less in spite of a previous cauterization, deficiency should be corrected without delay by a renewed application.

(*c*) *Sterilization by the actual cautery.*

Phagedænic forms of chancre, characterized by dusky swelling and a rapidily-spreading more or less gangrenous decay of the penile tissues, can be rarely arrested by anything short of the energetic application of the actual cautery. In some cases renewed searing will be required to check the trouble brought under control in one part of the ulcer, but extending further in another direction from a limited part of the lesion. It is especially important to search out all recesses overlapped by the undermined margin of integument, as they are the chief nidus of active infection. The thermo-cautery, or red-hot iron, should be well inserted in all of these recesses and sinuses, otherwise the result will be incomplete or entirely unsatisfactory. The wound should be packed with very narrow strips of idoform gauze while the patient is still under the influence of the indispensable anæsthetic, and care should be taken to line all nooks and crevices of the irregular wound with the gauze. The object of this is to prevent retention, and to secure prompt disinfection of the discharges which needs must be absorbed by the dressings. The penis is enveloped in an ample compress, moistened with warm carbolic lotion (1 per cent.), over which is placed a piece of rubber tissue to prevent evaporation. Daily change of dressings is to be done after a hip-bath, which will very much facilitate their painless removal. The febrile disturbance regularly noted with these most virulent forms of specific ulcer, and the general debility and anæmia, which is its main predisposing cause, appropriate roborant and anti-febrile general treatment.

As soon as cicatrization shall have commenced, the affection is to be treated like a simple ulcer.

The foregoing view of the relation of suppuration to syphilitic lesions is based exclusively upon clinical data, and requires corroboration at the hands of pathologists more expert in systematic and exact research than the author. One object of these remarks was to arrange the clinical facts pertaining to syphilitic ulcerations under a general principle, from which the therapeutic measures usually employed for their cure could be easily and

logically deducted. Another object will be fulfilled if the foregoing thoughts of a clinical observer will induce further inquiry into the interesting and practically important field of mixed parasitic infection.

INJURIES RELATING TO THE ELBOW-JOINT.*

BY J. P. BROWN M.B., L.R.C.P., GALT, ONT.

Among the most common and at the same time most troublesome accidents to which young boys are liable, are those relating to the elbow-joint. While Erichsen, Wilson, Miller, and a number of other authorities in surgery say nothing in regard to the comparative frequency in the sexes of accidents in this region, Holmes tells us very pointedly that fractures and dislocations at the elbow are much more common among boys and young men than among persons of the opposite sex. My own experience is in strict accord with this dictum, for while I have had a goodly number of boys pass through my hands suffering from elbow accidents, yet I never saw a girl suffering from a similar injury. In speaking to my medical *confrères*, I find that their experience in this matter agrees pretty generally with my own. This almost total one-sidedness seems to be a peculiar circumstance, as our Canadian girls are almost as fond of out-door pastimes as our boys; witness as we may our ice-ponds, skating rinks, and toboggan slides in winter, and our croquet and tennis lawns in summer.

There is one field, however, supplying probably one-half the cases, which the boys have about entirely to themselves—the very extensive one of free rides on wagons and sleighs; and if our municipal councils and magistrates were sufficiently active in rooting out the evil, this class of injuries would materially weaken in regard to severity as well as frequency. During infancy and boyhood—fractures at the elbow or perhaps more correctly, separations at the epiphyses—are more common than dislocations; and while fractures often occur by themselves, dislocations rarely do. All authors dwell on the frequent difficulty in diagnosis, arising from several features incidental to injuries in this locality. In early life the muscular and areolar tissues of the arm are soft and pliable, and so susceptible to rapid distention by serous effusion, that it is often, when the surgeon is summoned, impossible to tell the exact nature of the injury. How frequently, when he arrives several hours after the accident, there is so much tenderness and swelling, that although he can discover deformity and produce soft crepitus between the segments of the severed cartilage, yet fails to diagnose with absolute certainty, whether the head of the radius is *in situ* or not, whether the condyles have been separated from each other, or the shaft, and whether the olecranon itself has entirely escaped injury or displacement. The surgeon is almost forced to treat cases of this nature on general principles.

The text-books tell us that when serious doubt presents itself, we should for a time abstain from active treatment, place the injured arm on a pillow, apply evaporating lotions, and when the swelling abates, reduce the parts to position and put on our splints.

It appears to me that there are one or two serious objections to this line of treatment. In the first place, the evaporating lotions do not reduce the swelling to any appreciable extent, for the very obvious pathological reason, that the displaced fragments, whether fractured or dislocated, are of themselves a source of constant irritation to the tissues, and must be until reduction is effected; and in the second place any physician, whose reputation is not thoroughly established, would be sure to lose what little he possessed by any such protracted waiting. Hence, if not productive of direct good, such procedure would scarcely be justifiable. I have often also doubted whether the orthodox active treatment as usually laid down by our works on surgery, is altogether to be relied on. For almost all the multitudinous injuries in the vicinity of the elbow, flexing the arm to the right angle, the application of splints, the arm being kept in a position midway between pronation and supination, and supported by a sling, appear to be the *sine qua non*. Erichsen makes some exception in the case of head of the radius being displaced forwards. He favours the straight splint, but leaves the question open; while all authorities enjoin the straight splint in fractures of the olecranon. These I believe are about the only exceptions to the general rule.

* Read before the Ontario Medical Association Toronto, June, 1887.

My own opinion is, that our text-books are too lax in dealing with cases of this nature. We have general principles instead of fixed data to work upon, the result being sometimes detrimental to the best interests of the sufferers.

During childhood, not only are the tissues soft and yielding, and the bone textures merely in a process of consolidation, but the little patient is restless, nervous, irritable, and not easily controlled. It is often a difficult matter to so bandage the arm in a flexed position, that the various segments constituting the joint may continue *in situ* as when the splints were first applied; as the swelling in the arm abates, the bandages slacken, thus favoring displacement; this untoward result much to the doctor's annoyance, being aided also by the irrepressible activity characteristic of the early years of life. This is bad enough when the latter is not absolutely certain in his diagnosis; but infinitely more so when he is certain, and when he knows that a proper reduction has been effected.

Of late years I have as a rule pursued a line of treatment, somewhat at variance with the orthodox methods, and in nearly all cases have used straight splints of pasteboard held in position by starch bandages as the first dressing. One of our chief difficulties in many of these cases is, first to find, and then to insure for the future, the position of the head of the radius. We are told that full extension will reduce a dislocated head. If that is the case, then continued extension will insure continued reduction; and a week in that position would in a great measure restore the orbicular ligament to its original attachment.

In separation of the epiphyses of the humerus, well padded anterior and posterior splints would give perfect immobility, a thing so essential in juvenile cases; while it would limit to a minimum the retractive force of the triceps. In dislocation of the ulna backwards, when there is any reason to suppose that the head of the radius may have been displaced, the straight position after reduction, if continued for a week or so, would effectually guard against all peradventures; and so with nearly all complicated cases. I think from my own personal experience, as well as from the anatomical construction of the joint itself, that there are few injuries at the elbow in juvenile life, in which, for the first dressing, the long well padded splints are not preferable to angular ones. Hamilton recommends that passive motion in elbow injuries be commenced at the end of one or two weeks. If that be allowable, then the long splints could be safely removed after the like interval, and angular splints adjusted, if the nature of injury demanded it.

I was very much pleased to see, in the October issue of the *Canadian Practitioner* for 1886, that Dr. White, the esteemed Secretary of our Association, had advanced views very similar to my own, in an able address delivered before the Huron Medical Association. In that article, however, there was no citation of cases; and probably I cannot do better than conclude, by briefly relating my own experience in this matter for the past few years.

Case I. On May 9th, 1881, D. B., a boy aged thirteen, fell off a branch of a tree, alighting on his elbow upon the stone-bed of Mill Creek, producing a compound fracture of the olecranon process. The wound was ragged, oblique, directly over the process, and nearly two inches long. The olecranon was severed and retracted slightly by the triceps muscle; the forearm flexed and the joint laid open, venous hemorrhage being quite profuse. The clothing being removed, I flexed the arm still more, and douched it freely with tepid water, thus checking the hemorrhage and cleansing it from foreign matter. The arm was then fully extended, parallel with the body, bringing the segments of bone almost in juxtaposition. A long, well padded splint was applied in front of arm, from shoulder to wrist, and the bandages so arranged as to draw down somewhat upon the upper fragment. The wound was dressed with carbolic oil, one to eight, on lint, oil-silk protective, light bandages, and patient put to bed. The olecranon was separated from the ulna about the eighth of an inch. Patient improved very nicely. There was slight rise of temperature. The wound filled with granulations, and by the tenth of June was entirely healed. There was bony union, but the olecranon process seemed slightly elongated. This was one month after the accident and marked the commencement of passive motion; this was gently but persistently carried out, and when, after another month's interval, I again examined the lad, the adhesions at the joint had become pretty firm; for although passive motion had been

practised daily, he could only bend the arm to an angle of 140 degrees.

On the 30th of July, nearly twelve weeks after the accident, Dr. Radford kindly administered chloroform, and we broke up the adhesions by forcible flexion, bringing the arm to a little less than a right angle. More could not be done with safety. Passive motion was of course continued; the result was that the boy has a very useful arm, flexing to a right angle—with full pronation and supination. Owing probably, however, to the elongation of the olecranon, he could never fully extend the arm after the forcible flexion under chloroform.

Case II. On the 4th of June, 1885, Mrs. R.'s little boy, aged 21 months, fell off a table, injuring his right elbow. Owing to my absence from home, I did not see him until the 7th. By this time the joint was very much swollen; the child was feverish and crying with pain. It was very difficult to tell the exact nature of the injury; still, there was soft crepitus, and I thought the head of the radius was thrown forward. The limb was extended fully, with coaptation; well padded pasteboard splints applied, the full length of the arm, and retained in position by a starch bandage. The child was placed in his crib and arm extended on a pillow; all pain subsided. A week later I removed the splints; the swelling had gone, the radius was *in situ*, and bringing the arm to a right angle, a starch bandage was applied for another fortnight. The child trotted about quite contentedly and fully recovered.

Case III. On August 10th, 1885, Mr. C.'s son, a stout little fellow, aged 5 years, fell some distance, upon his elbow. I saw him in less than half an hour; there was fracture at the epiphyses of the condyles. This was very distinctly marked; the whole elbow projected backwards, and being replaced by extension, slipped back again the minute the arm was released. The head of the radius was also thrown out to the front. There was a good deal of external bruising, but no laceration of the flesh. The boy had a full, soft, fleshy arm; and it seemed to me almost impossible to insure the retention of the head of the radius, together with the fractured humerus, by means of the angular splint. Coaptation, together with extension, reduced the head simultaneously with the severed condyles. Extension was kept up while the long pasteboard splints and starch bandage were applied —this, too, with moderate tightness, to prevent the segments of the humerus from slipping upon each other. A few hours later, I loosened the bandages somewhat, by snipping the upper and lower ends for a short distance. There was no discoloration of the hand and very little pain; the splints were not removed for two weeks. When examined, the head of the radius was in position and the humerus had united at the epiphyses. There was a good deal of ecchymosis all round the joint, but no tenderness on pressure. The arm was bent to a right angle and an appropriate splint applied for another two weeks, resulting in perfect cure.

Case IV. On January 18th, 1886, a medical friend sent for me in consultation. A Mr. G.'s son, aged 10 years, had fallen on the ice on New Year's day, injuring his elbow. There was a good deal of swelling about the joint when the doctor saw him, coupled with deformity and obscure crepitation. He diagnosed separation of the epiphyses and displaced radius forwards. He reduced the arm and put on the orthodox angular splint; the patient apparently did well. On examining him, however, in the office that morning, he found the head of the radius dislocated forwards. The forearm could not be extended fully, neither would it permit of being brought to a right angle. We administered chloroform and then put on full extension. The head of the radius was pressed, without much difficulty, into its natural place and one of us holding it in position, the other bent the forearm to an acute angle, thus effectually preventing the head of the radius from again slipping forward. The arm was bound in position, and kept there for a week or two, resulting in perfect recovery. It is by the kindness of the attending physician that I am permitted to report this case.

Case V. On September 24th, 1886, the son of Mr. H., aged 9 years, fell from a grocery waggon, alighting on his elbow, and resulting in separation of the shaft of the humerus at the epiphyses; radius was *in situ*. Believing from past experience that the long splint was best and safest, I applied my ordinary pasteboard with starch bandage, thus securing immobility. After the first day or two, the boy was allowed to walk about, hanging his arm by his side. In two weeks I dressed it again, with angular splint, and in due course recovery was perfect.

Case VI. On October 23rd, 1886, Mr. F.'s son, aged between 9 and 10, was thrown from a waggon with great force, falling with all his weight upon his extended left hand. I found the arm pronated and flexed, and shortened fully two inches; the forearm was dislocated directly backwards. The olecranon process could be felt beneath the skin—behind the humerus, while the projection of the condyles, forward, increased the anterior posterior diameter of the joint very materially. The inner condyle was movable, while the transverse diameter seemed to be considerably increased. Counter-extension was performed by an assistant. Reduction was produced by extension over the knee, but as the coronoid process was locked in the trochlea of the humerus, it took all the strength I had to accomplish it. The width of the joint, however, was not reduced; the internal condyle being movable and very prominent; there was evidently separation between it and the shaft; the radius, apparently, had not been displaced. As I still felt somewhat doubtful with regard to the full extent of injury, I again put on the long splint, padding the inner condyle, however, so as to counteract the brachialis anticus; this time, however, only for a week. On removing the bandages, the whole arm was in a state of ecchymosis, from the internal hæmorrhage produced by the injury. The olecranon and head of the radius were in position, and the inner condyle firm, but prominent as before. I adjusted an angular splint, which patient wore for several weeks, followed in turn by passive motion. The arm is strong, but somewhat limited in movement; pronation and supination are intact; the hand can be brought to the mouth, but cannot be extended or flexed to full extent—by two or three degrees; the projection of the inner condyle is sharper than usual, while the breadth of joint still continues. On the whole, however, he has a very good limb; his people are well satisfied with the result, and frequently compare his case with his cousin's, who, after a similar injury, had his arm completely anchylosed.

I cannot claim for this paper perfect accuracy as to my views; but such as they are, they arise as a result of experience; and if they serve as a modicum of food for thought, if not for discussion, I shall be more than satisfied.

THE RELATIONSHIP OF INSANITY TO MASTURBATION.*

BY STEPHEN LETT, M. D.,
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In endeavoring to estimate, and arrive at conclusions, as to the relationship that exists between the unnatural gratification of the sexual appetite by masturbation, and the psychological effects consequent thereon, we are met at the threshold of the enquiry by a lack of reliable data upon which to base opinions or demonstrate facts. The very secret nature of the vice prevents us from knowing by whom and to what extent it is practised. If we turn to hospital and asylum statistics, unreliable as they are in other matters pertaining to the causes of insanity, they are absolutely worthless in this particular. The admission papers filled out by the family physician do not in a very large majority of cases throw any light upon the subject, and in the few instances where masturbation is set down as the cause of insanity, it is but a factor or a single link in the long chain of combined causes which led up to and finally culminated in an attack of pronounced mental alienation, whilst in many instances it is not a cause but the result of disease in the nerve centres, its proper significance in such cases being that of a symptom the same as insomnia, delusion, restlessness, or other phenomena which go to make up the clinical history. It is now a pretty generally accepted fact that there are very few, if any, single factors, other than of a traumatic or syphilitic nature, which are of themselves efficient causes for the production of insanity; and that, in order to form a true estimate of the forces which are at work in producing this ever increasing malady which is overflowing our asylums and filling our gaols, we must look at the subject from a general rather than a restricted point of view, and take into consideration the whole environment of the individual, making strict inquiry into his race, type, family history, bodily health, and his struggle for existence. But perhaps in not one of the ascribed causes of insanity is this general inquiry of more importance than in that of masturbation.

Some people will no doubt contend that masturbation, *per se*, is quite sufficient to produce insan-

*Read before the Ont. Med. Association, June, 1887.

ity, and many writers accurately describe a class of so-called "Masturbational Insanity": but if all those who masturbated to excess became insane, it would be beyond the powers of any government to provide asylum accommodation for this class alone. It is not, however, the strong and healthily constituted rustic lad, physically strong and mentally sound, who comes under its baneful influence to any very serious extent. His indulgences —and, I presume, the most of them do indulge— are not usually carried to any very great excess. He has an abundance of vital force and nerve power which can stand a moderate amount of depletion without any very serious damage to his general health or mental vigor. Not so, however, with the weak, nervous stripling, tenderly raised in the vitiated atmosphere of a large city, whose ancestral inheritance is, physiologically speaking, of a low type—the boy or girl who comes into the world with an unstable nervous organization, with an insane diathesis, as some have aptly described it, with his whole animal economy crippled, and who never had the proper controlling influence of his nerve centres adequately measured out to him. This is the individual who masturbates to excess, and in whom the indulgence produces the most disastrous results. He learns the vice early in life; the more he practises it the greater is the desire to continue it, and the habit is forced upon him without his being able to exercise the controlling power of a naturally weak will, he soon prostrates all his nervous energies, and being already predisposed to insanity, an attack of melancholia or acute mania is precipitated.

In such subjects masturbation may be set down as an exciting cause of insanity. They are the cases writers describe under the head of "Masturbational Insanity," and evince feelings of egotism, conceit, self-importance; they frequently have delusions in harmony with this line of conduct, and yet they are irritable, nervous, restless, and shun society, especially of the opposite sex. They frequently become religious, and are looked upon by their parents and friends as models of morality. This condition of ill-health gradually increases, unattended at first by any acute symptoms of sudden demonstration of an unbalanced mind; the patient soon begins to act strangely. This is noticed by friends and relatives, but cannot be accounted for; overt acts are committed, and finally an attack of acute mania renders it necessary to remove him to an asylum, or profound melancholia with suicidal tendencies and self-accusations of having "committed the unpardonable sin" may take its place.

Whilst a certain number of such cases recover, a large proportion of them are incurable. The constant drain upon the system, irritation and exhaustion of the great nerve centres, produces structural changes of a permanent character, and the patient after a variable period, lapses into a condition of chronic insanity, frequently degenerating into dementia or mental oblivion.

In early life the child who thus pollutes himself retards and arrests the healthy development of his nervous system, and the practice in such an one tends to idiocy and imbecility rather than to insanity.

Although, in the sense in which I have pointed out, masturbation may be set down as an *exciting* cause of insanity, it would be a grave error to conclude that all insane persons who practise self-abuse have thus caused their mental estrangement. Should any of you pass through the wards of a large asylum for the insane, and in the morning carefully examine the beds and linen of the patients, you would find evidence of masturbation amongst many of the chronic as well as acute forms of insanity, and would be able to note amongst them all classes of mental alienation. In many of these cases the practice is but a symptom and not a cause of their illness. The intellectual part of our nature being disabled, the animal passions burst forth and self-indulgence in all its unrestrained gratification reigns supreme. This condition is often noticed in the early stages of the general paralytic. It is frequently seen in puerperal insanity, though here it may in part be due to local irritation. It is also noticed in that form of insanity coming on at the climacteric period, when it has been spoken of as "the final blaze of passion before its complete extinction or altered condition"; and perhaps the same remark would apply with some force to an old man of seventy-five summers, whom I once had under my care, and of whom, like DeQuincey and his opium, "to ask whether on any particular day he had or had not indulged, would be to ask whether his lungs had performed respiration or his heart fulfilled its function." Dr. Savage, in his admirable little work on Insanity, records a

case where self-abuse was habitually practised by a chronic lunatic at the advanced age of ninety."

Of late years so much has been accomplished in Italy, France, Germany and England, as well as on this side of the Atlantic, in a topographical survey of the brain and mapping out centres for the various functions of the body, it seems desirable to give a synopsis of what is known regarding a centre for the sexual function, irritation or disease of which would naturally produce modifications in the sexual appetite, and might be a cause or result of masturbation.

The theory of Gall and his followers, "that the instinct of propagation or sexual appetite has its seat in the cerebellum, and that this portion of the brain is exclusively devoted to that function," seems, in the light of our present knowledge derived from recent experimental and pathological research, to be entirely disproved. Ferrier failed to find any indications of excitement of the generative organs in monkeys or other animals, male or female, during irritation of the median or lateral lobes of the cerebellum. The foundation had been taken from Gall's theory by the experiment of Flourens on a cock, the half of whose cerebellum he had removed. The mutilated animal having been put several times with the hens, always tried to tread them but never could succeed on account of his inability to maintain his equilibrium; and it is further stated that, notwithstanding this traumatism, his testicles were enormous.

Clinical facts also go to refnte Gall's theory. The case is recorded of a girl in whom the cerebellum was absent, nevertheless she suffered from nymphomania; and of another who suffered in a similar way when there was atrophy of the cerebellum. But the finishing stroke to Gall's hypothesis appears to be given by Luciani, who on the 2nd of May, 1882, removed the whole of the cerebellum of a bitch; she on the 2nd of September was in heat, and presented tumescence of the vulva, as well as a sanious discharge from the vagina, together with other signs of eroticism. A lover was obtained for her, and with much satisfaction, coitus was several times successfully accomplished. She became pregnant, and in due course brought forth four living puppies.

Having thus shown that the cerebellum is not the centre of the sexual function, as was formerly supposed, it is important to adduce such evidence as can be obtained which will indicate its probable seat. Up to the present time the point does not appear to be settled, or its probable location established with any degree of certainty, but from data given, it would seem that the upper part of the spinal cord, the medulla and the pons, have something to do with the sexual function.

Ferrier states that "the instances in which disease of the cerebellum have coexisted with priapism, have been chiefly cases of apoplexy or hemorrhage into the middle lobe, a condition of things eminently calculated to cause irritation of the subjacent posterior surface of the medulla oblongata and pons. Whilst irritation directly applied to the median lobe of the cerebellum produced no vascular turgescence of the generative organs, it has been found by Segalas, that irritation of the posterior aspect of the medulla and pons produces this effect." Eckhardt and others have likewise shown that irritation of the pons and as high up as the crura cerebri, cause vascular turgescence of the generative organs and priapism. This effect, however, may be due to the relaxation of the local blood vessels in the sexual organs, which would be a natural sequence to certain injuries of these nerve centres.

It is held by some of the most able scientific men of the present day that the sexual desire is in close relationship with the emotions, and that the cerebral centres which contribute to the emotional state, are also, to a large extent, the centres for the sexual appetite. Thus Ferrier states, "that from certain facts of experiment, we have reason to conclude that the centres of sexual feeling are probably localizable in the regions connecting the occipital lobes with the lower and inner part of the 'tempora-sphenoidal lobe'; and he adds that, as the reproductive organs in women form such a preponderant element in their bodily constitution, they must correspondingly be more largely represented in the cerebral hemispheres, a fact which is in accordance with the greater emotional excitability in women and a relatively *larger development* of the posterior lobes of the brain."

It would also seem quite probable that the centre for the sexual appetite is in close proximity to the centre for smell. As in the lower animals the sense of smell is one of the most powerful excitants of the sexual desire, the location pointed

out by Ferrier as the probable one, would also fulfil this condition. The localization of the sexual centre, however, is a subject which requires further proof from experimental and pathological investigation.

That masturbation is a most debasing, debilitating and depressing vice, which has a deleterious influence upon the physical, mental and moral nature, is beyond doubt. It is equally true that its baneful effects are, *cæteris paribus*, in direct ratio to the early age at which it is practised, the extent to which it is carried on, and the nervous instability of its unfortunate victim.

Masturbation occurs in both sexes, and under similar conditions is equally harmful to the mental vigor of either. It is practised by the youth not yet in his teens, indulged in by the adolescent, and not abandoned by the octogenarian.

Masturbation, with an adequate predisposition, is an exciting cause of insanity; it is, perhaps, more frequently a symptom of that disease, but when present it hampers treatment, retards recovery, and in many instances precludes the possibility of a cure.

Correspondence

To the Editor of the CANADA LANCET.

SIR,— In your article, in the July number, on "American Graduates in Canada." you state very fairly why reciprocity in medical degrees is not advisable, albeit the 'Council,' not the schools, is responsible. Still the influence of the schools in the Council shows itself clearly in one "vexatious requirement." A student from a confessedly better school in the United States, no matter how well up, is not permitted to present himself for examination until he has spent a term at a Canadian school, and paid about $120 in fees.

As to British licentiates, reasons why they should be re-examined are evident. That many of our best men find a difficulty in passing some examinations in Britain is undeniable; yet it is well known that many of our worst go abroad to avoid the Council's examination, and I have yet to learn of one who failed to obtain a license in less than a year if he applied to the right place.

It is generally admitted that the Council's matriculation is too easy. It is known that two and one-half years and a bogus certificate of having been an apprentice for a year fulfils the requirements of time, that men with the rudiments of an English education, during this time, get up both matriculation and professional work, that the standard of examinnation is altogether too low. If British licentiates may practise in Ontario, the Council is powerless to reform these abuses, so long as some British institutions accept from our schools certificates of matriculation, and indeed several primary and final subjects as well. If the Council says to students, "you must matriculate, spend four years in professional studies and know something about your work," they may defy it, as they have done time and again, go to Britain and with only a nominal matriculation, in less than three years from the commencement of their medical studies practise in Ontario with a foreign licence. Surely no school in the United States passes students more easily or more quickly than this! Are not British examiners rather lenient with colonists?

C.

July 2nd, 1887.

MEDICAL SCHOOL CHANGE—OUR MEDICAL COUNCIL.

To the Editor of the CANADA LANCET.

SIR,—You, and your many readers have, long ere this, read of the change which one of our medical schools has seen fit to make. After a career, somewhat long for a country so young as Canada, the "Toronto School of Medicine" has ceased to exist as such, and, with the School of Practical Science, has become the "Medical Department of the University of Toronto." Men, nay, even boys, have the right to make somersaults when they see fit, and why should the same privilege be denied to medical schools?

The change referred to has been paraded in the daily papers, as though a "new" body had been formed. The name is new, it is true, and the relations are changed somewhat, but after all, with hardly an exception, the long published list of teachers, of one kind and another (there are only twenty-nine, as yet!!!), consists of the Faculty of the late "Toronto School" and that of the "School of Practical Science."

The friends of this "new departure," especially those who have made it, are at perfect liberty to

think very highly of the change of front they have found it necessary to make. In this, no one should seek to interfere with them. But, if as judicious as they should be, they will boast with great caution with regard to the future. As separate bodies, their respective records are before the public; and, while respectable, they have been by no means extraordinary. Great care should be shown, too, by these parties, in avoiding disparaging criticism of other Ontario medical schools, whose success, during many years, has been so great as to challenge attention everywhere, and to gain for them a most enviable reputation for thoroughness in the training given to their students. These schools are, owing to the high position they have attained, after many years of laborious and self-denying work, unwilling to undergo any transformation, and it is greatly to their credit to be able to say truthfully, that *no change could increase public confidence in them.*

While, however, modifications may occur in medical schools, from unforeseen causes, at any time, it is fortunate for the profession, and greatly to the advantage of the public, that we have a Medical Council Central Board, before which every candidate for licence, no matter where he has studied or graduated, must present himself. Ontario has good reason to congratulate herself on being, in this respect, far in advance of most countries, in having this one central supreme board —entirely independent of any school, or college, or university, at home or abroad. The effect of this central board's examinations in stimulating *all* our students, in *all* our schools, to work hard far harder than they otherwise would do, cannot be overestimated. It would be an evil day for the profession, as well as the public, were the Medical Council, or its carefully appointed Medical Board, to allow any tampering or intermeddling on the part of any medical school, or other teaching medical faculty. Before the Medical Council's Board all medical schools stand on precisely the same level, and all must accept, and heretofore have willingly accepted, the excellent curriculum the Council lays down.

Any attempt, as one of our daily papers (doubtless inspired by interested parties) foreshadows, to dictate a curriculum to the Council—from whatever quarter such may come, would be very audacious, and would be stoutly resisted by the entire medical profession. To swerve by one hair's breadth from its present judicial position, with respect to all our schools, would be destruction to our respected Medical Council, while to maintain that position of perfect independence and impartiality, means its rising higher than ever in the respect of the profession, and of the people at large. Every true friend of medical education in Ontario to-day, will rally to the support of our Medical Council, should its complete independence be, in any way, assailed; for, being independent of all schools and colleges, it is the body to which the public specially looks, and may look with confidence, to have their best interests carefully and continuously protected.

OBSERVER.

Aug. 1, 1887.

Selected Articles.

THE FINANCIAL VALUE OF SANITARY SCIENCE.

The "Financial Value of Sanitary Science" formed the text for an able address given by that veteran worker in sanitary science, Mr. Edwin Chadwick, at the annual meeting of the Association of Public Sanitary Inspectors last week, and no man probably ever had more qualifications for the task, or could speak from such experience and with greater authority than this esteemed President of the Association of Public Inspectors. As complementary to the recent Parliamentary Budget, he submitted by way of example for the "health of nations" the financial value of properly qualified sanitary science. First referring to the amounts of money charged upon the community, arising from the excessive sickness and mortality which had been proved to be preventable by sound sanitation, he said some approach might be made to estimate the amount of those charges from the ascertained incomes of the life-insurance companies, which perhaps did not comprise more than two-thirds of the population. There were some ninety-three of these companies, comprising almost exclusively middle-class persons, of which companies the annual income was stated to be £23,000,000. There were also the great friendly societies of all sorts, whose aggregate insurance charges, as stated upon the authority of Sir James Paget, were £25,000,000 annually; the two yielded a total of £48,000,000 annually, three times the amount of the poor rates. And if they could ascertain the full number of the uninsured, he expected that the whole would double the total Budget for both the army and the navy, which was stated to be £32,000,000. Thus they

had an annual invasion of an enemy, in the form of preventable disease, which every year fought and won a battle against the community, and every year slew in the United Kingdom upwards of 100,000 of the people beyond the present reduced death-rate, all of whom they knew and had proved might have been saved by more efficient sanitation, and at a saving of double the annual cost of the naval and military defences. Of the the loss for the killed and wounded—that was to say, for 100,000 deaths of the wage-classes—for every death of an adult there were found to be twenty cases of painful sickness and of disablement and loss of work. The total estimated pecuniary loss for the killed and wounded in civil life might be estimated as exceeding by two-thirds the estimates voted by Parliament for the governmental expenditure of the empire. Even in this metropolis, said Mr. Chadwick, the lowest death-rate place of any capital of the chief States of Europe, or of New York or of any other great city in the United States, we have shown by what had been done by partial application of sanitary defences, there were upwards of 20,000 killed and wonnded annually which efficient sanitary defences might have saved. All this excessive loss of life as well as of money, when examined, would be found to be due to wastefulness in legislation and administration. The only effective preventive would be found to be in the superior economy of tested and corrected sanitary science. In the metropolis the executive functions were generally carried out under inadequate instructions as to the qualifications required and without securities that those instructions were duly applied for the protection of the public. In their ill-informed or uninformed condition these local bodies, the vestries, were generally positively unaware of the need of the undivided attention required for sanitary service, and they gave such low salaries as often to leave the chief local health-officers under the necessity of making up their income by private practice—that was to say, curative practice—the difference between curative practice and preventive practice in the new science of sanitation not being perceived by them. A revision and consolidation of preventive functions, now scattered over different and weak departments, and systematised under one department and under unity, with an executive board under the supervision of a Minister of Health, would be found on examination to be necessary for the pecuniary relief of the population from the greatest and most grievous of its burdens, as well as for the advancement of its health and strength and the happiness of its existence. It was due to state that with all the shortcomings of defective local administration, the advances made in sanitary improvements during the reign of Her Majesty had been greater than in any country in any of the great States.

In France they had only got a centralisation against the people chiefly for military levies, and they were now only making slow progress with centralisation for the people in their places of work, for the protection of the people in their habitations, for their protection against tyranny in the productive freedom of service. In France the death-rate was 3 in the 1,000 more than in England, which meant that there was a preventable slaughter there of 112,000 lives more than there was now in England. In Germany the mortality of the army was the lowest in Europe, and there was much to say in the way of example of the economics wrought by it; but under the municipal government the death-rate of the civil population in Germany was very high; it was 6 in the 1,000 higher than in England, which meant a sacrifice of 135,000 more than were now annually sacrificed in this country. In Italy the death-rate was 8 in the 1,000 higher, which implied a sacrifice of 224,000 lives to the wastefulness of ignorance there. In Austria the devastation was still greater even than that; it was no less than 11 in the 1,000 above our death-rate, which occasioned a loss in that empire of upwards of 400,000 more than the present rate in England and Wales. But the death-rate of the army in Russia was three times greater than of the army in Germany; and the death-rate of the civil population, as described by the Registrar-General of France, was still more terrible. To an international arbitration a decisive case could be made out against the extension of such bad government over any population. These were examples of the wastefulness of ignorance and sloth against the economies of well-applied sanitary science. In the United Kingdom the mean duration of life had been advanced, during the reign of Her Majesty, from thirty to thirty-eight years, leaving a further equiv-equivalent advance dependent on the advance of a more economical sanitary organization of paid service.

In concluding his able address, Mr. Chadwick asked his hearers to accept it as true from one who had seen eighty-six summers that theirs was as good a work as the sun ever shone upon; and that, long before another eighty-six summers should have passed away, it would be recognized as work which deserved the fullest recognition and the most liberal reward, if it were carried out—as he was sure it would be—in the spirit as in the letter, faithfully, vigorously, hopefully manfully.—*Br. Med. Jour.*

BORACIC ACID IN THE TREATMENT OF LEUCORRHEA.

For months past I have made frequent use of boracic acid in the treatment of leucorrhea in a manner hitherto unmentioned, at least so far as has come under my notice, and with surprising

success; in every case where I applied it prompt and permanent improvement resulted.

Having had some excellent results from the boracic acid packing in chronic suppurative otitis, I determined to resort to its use in a similar way in a case of leucorrhea which had for several months resisted a most persevering use of the regular orthodox remedies, *i.e.*, nitrate of silver, tincture of iodine, fluid hydrastis and bismuth, hot water irrigations, etc. The experiment was eminently successful, and the patient returned home within a fortnight, well and happy, and has so remained ever since, many months, during which time I have had occasion to resort to the remedy frequently and with uniformly good results.

My manner of using it is as follows: Having first irrigated the vagina with water at as high a temperature as can well be borne by patient, a cylindrical speculum is introduced and the vaginal walls very carefully dried, first with a soft sponge and then with absorbent cotton. This done, boracic acid in crystals is poured into the mouth of the speculum and pushed up against the uterus and vault of the vagina with a clean cork caught in a uterine sponge carrier, sufficient acid being used to surround and bury the intravaginal portion of cervix, filling the upper part of vagina. A tampon of absorbent cotton is then firmly pressed against the packing and held *in situ* until the folds of the vaginal walls close over it as the speculum is withdrawn.

This should be allowed to remain three or four days or even longer, as after this time there still remain some undissolved particles of the acid, nor will the tampon seem at all offensive. The ostium vaginæ, if examined in twenty-four hours, instead of being besmeared with the leucorrheal secretion or discharge, presents a clean appearance, and bathed in a watery fluid which begins to appear several hours after the packing has been placed, and in my cases this was the only discharge noticed afterward.

However, a second or even a third repetition may be necessary, but in none of my cases, numbering nearly a score, have I found more than a second packing called for, and in many one sufficed; and in no instance has its use occasioned pain, not even inconvenience. I do not claim for this agent and method infallibility, nor should constitutional dyscrasias be ignored and this local treatment be depended on unaided to effect a cure, but here, as in the treatment of leucorrhea by other remedies, a proper association of all means having a curative influence upon the disease constitutes the rational therapeutics. My individual experience with this remedy in the treatment of leucorrhea, though limited to too few cases to establish its universal efficacy, if such a wide range of power can be claimed for any medicine at any time, none the less proves it as one of the agents which, when properly employed, promises much in the treatment of the annoying and sometimes intractable conditions constituting the pathalogy of leucorrhea, particularly when the change is in the vaginal glands or mucous membrane or from intracervical inflammation. Nor will harm likely result from its use, though it fail in maintaining the place my experience would give it.—Schwartz, in *St. Louis Cour. of Med.*

TREATMENT OF ERYSIPELAS.

The treatment of erysipelas is most varied, nearly every practitioner who sees much of this affection having formulated a certain line of action for himself. This arises to some extent, I think, from the fact that simple erysipelas has a tendency to subside spontaneously in about 5 or 6 days, and often the treatment adopted obtains the credit while nature does the work. I am of opinion that the treatment must depend upon the type of the disease. In all the cases I have seen, the treatment demanded was a stimulating one. I refer to simple general erysipelas. But in localized erysipelas affecting the throat, ear, and pharanx, aconite in small doses, frequently repeated as recommended by Ringer, has been productive of the happiest effects when administered at the beginning of the attack. I will take as a typical example of simple cutaneous erysipelas that form which we so commonly see, commencing over the root of the nose, and spreading over the face and forehead. In such cases, I immediately begin the administration of 20 to 30 minims of tinct. ferri mur. (diluted of course with water) every two hours; and as a protective and palliative, I use: R. gutta percha, ʒ ii; chlorof. meth., ʒ ii, solve; zinc. oleati, ʒ ii; iodoformi, ʒ ss. M. Sig.—To be painted over the part affected. The advantage of this preparation over the powdered starch, zinc, or flour, is it comeliness. Of course, previously to applying this preparation, I have the parts carefully washed with tepid water, and often when there is much pain I use the decoction of poppy heads as a fomentation. This treatment usually effects an amelioration of the symptoms, and the disease subsides. But in some cases the course the disease does not stop here, it runs riot all over the head and neck, and the medicinal treatment then pursued is ammonia, bark, iron, and quinine, with perhaps a grain of solid opium to obtain rest. I am happy to state that I have never lost a case of erysipelas, although the duration and severity of the complaint have varied much. The *rationale* of the local application above mentioned must be purely protective and palliative, by excluding the irritating effects of the cold air, and not by excluding specific germs.

The latest researches prove that the schizo-

mycetes or streptococcus erysipelatosus is anærobic, or flourishes where air is excluded, living in and upon the tissues affected. I may note the many methods of treatment recommended, such as compression, or ligatures applied above the seat of the affection, advocated by Velpeau; the application of a solution of nitrate of silver in the form of a ring around the redness (Higginbotham's method); the application of tincture of iodine, white paint, solutions of tannin, silicate of soda, used by Alvarenga, of Lisbon; the subcutaneous injection of carbolic acid or salicylic acid directly into the part, and the internal administration of quinine in large doses, as salicylate of ammonium, suggested by Dr. Barclay, of St. George's Hospital. These may all be good, but so satisfactory have been the results by the iron and the antiseptic anodyne externally applied, that I have had no reason to depart from that treatment. I earnestly look after the hygienic surroundings of the patient, and give eggs, milk, beef tea, and other stimulating and light diet. The disease may, however, pass into a stage when surgical treatment must be adopted. If simple bullæ or vesicles form, I relieve the tension by evacuating them, and dress the surface with tartrate of potash and iron lotion in the strength of 10 grains to the ounce of water. When sloughing and suppuration take place, I make free incisions; the pus and sloughs thus obtain a free exit; the separation of the mortified parts may be accelerated by the scissors. I then apply an antiseptic solution by means of the syringe or douche, dry the parts thoroughly, and dress with sublimated wood wool. The best antiseptic lotion is corrosive sublimate, one grain in five ounces of water, or nearly in the proportion of 1 to 2,000. Koch's solution, as it is now called, is the same as the old "M'Kenzie's" collyrium.

An important point which should not be overlooked in the treatment of erysipelas as well as in so many other affections, is the effectual clearance of the *primæ viæ* by a good purge, administered at the commencement of an attack. If erysipelas assume a typhoid form, alcoholic stimulants are strongly indicated. Infantile erysipelas I treat on the general lines laid down, although the tincture of iron is not so admissible, owing to its griping tendency; acetate of iron is less irritating. When erysipelas commences in the throat, inhalation, or the steam atomizer, with some antiseptic, should be used. I watch carefully for œdema glottidis. If it does occur, tracheotomy is the only resource.—Robert Pollok, in *Glasgow Med. Jour.*

The following were the fees as laid down by the New York County Medical Society of 1816:—Verbal advice, $5 and upward; letter of advice, $10 to $15; ordinary visit, $2; night visit, $7; Midnight, $25 to $30.

MEDICAL NOTES.

The remedy for *weak heart* is amyl nitrite.

Prof. Bartholow states that he believes nicotine, if rightly used, will prove to be our best remedy for *hydrophobia.*

Prof. Parvin, for all plastic *operations on the female genitals*, uses silver wire in preference to either silk-worm or cat-gut.

Dysmenorrhœa and sterility are not half as well explained by anteflexion as by an existing endometritis or metritis.—Parvin.

Prof. Bartholow insists that in *subacute rheumatism*, no remedy is comparable to Tinct. ferri chloridi, especially if in an anæmic subject.

From an antagonistic standpoint, of all remedies proposed for remedial treatment of *tetanus*, none are comparable to nicotine or the preparations of tobacco.

A mixture of collodion, 15 parts, corrosive sub., 1 part, if applied to small, superficial *birth-marks*, is stated by Professor Gross to act very nicely and effectively.

Anteflexion with mobility, in a virgin, is a physiological condition, and can only be called flexion when the uterus becomes immobile and bound down by adhesions.—Prof. Parvin.

For the *irritative fever of consumption*, Prof. Da Costa strongly advises the use of small doses of aconite. He claims it is a remedy of much value, and but little known to the profession in general.

Prof. Gross advises that a radical cure for a large *hydrocele* should not be undertaken at once. Evacuate its contents, and, when it has again attained a small size, again evacuate and resort to one of the radical means of cure.

Dr. Hunt, at the Pennsylvania Hospital, stated that he considered the treatment of *internal hemorrhoids* by carbolic acid a good procedure. He uses about four drops each of pure carbolic acid and glycerine, and injects one tumor at a time.

Prof. Gross states that he believes subiodide of bismuth is destined to replace, to a great extent, iodoform in the *antiseptic treatment of wounds.* It is being extensively used at the hospitals, and, as yet, with none but most gratifying results.

Prof. Parvin states that the best treatment for *chronic mastitis*, if the patient object to the radical operation, is firm compression by means of pressed sponge and a bandage, which is occasionally to be slowly saturated with carbolized water.

For the hygienic treatment of *epilepsy* Prof. Da Costa sums up as follows:—

Keep the head cool, the bowels open, and the

temper cheerful. It is probably better to allow no animal food at all; the best diet is one exclusively of milk and vegetables. Be most particular about the diet. Change the surroundings and scene if possible, and lead an open-air life.

A case of *sciatica*, following exposure and of nine weeks' duration, was treated by Prof. Da Costa in the following manner: Apply a strip of blistering plaster in the course of the nerve, and administer—

℞ Tinct. colchici seminis, . . gtt. xv.
Potassii iodidi, ... gr. x.
Tinct. zingiberis, ... gtt. x.
Syrup.,
Aquæ, āā . . . q. s. ad f ʒ ij. M.

Sig.—Take with water three times a day between meals.—*Col. and Clin. Rec.*

A NEW EYE SPECULUM.

The ordinary speculums are perfectly efficient in exposing the eyeball, but as they all have some part which enters within the margin of the eyelids, their use is necessarily attended with discomfort to the patient, which in slight operations, such as removal of foreign bodies from the cornea, or puncture of the cornea, is often more than the pain of the operation itself. For such cases the author has used the speculum shown in Fig. 1 for several years, and now brings it under the notice of the profession. It consists of a piece of stout wire bent into an oval ring at one end and a handle at the other, as shown full size in the figure. Fig. 2 shows on a reduced scale the mode

Fig. 1.

of application for removing a foreign body, the operator standing behind the patient's head. The ring is applied outside the lids and near their edges. The lids are then, if necessary, pulled more open by the fingers of the other hand. The pressure of the speculum gives it such a good hold on the skin that even the most intense spasm of the sphincter is powerless to close the eye. The pressure to a great extent fixes the eyeball, and also renders the cornea tense, which is a great advantage, especially in puncturing the cornea. In removing a foreign body it is usual and perfectly easy to hold a magnifier in the same hand as the speculum, but this may be dispensed with if preferred.—*Lancet.*

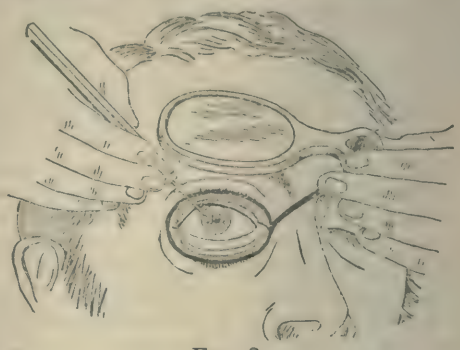

Fig. 2.

Subjective Symptoms and Objective Conditions in Dyspepsia.—Jaworski published in the *Wiener Med. Wochenschrift*, last December, a very valuable paper showing the results of a long and careful investigation of this subject which he has carried on. The conclusions which he reached are as follows:

1. Good nutrition speaks in favor of the localization of the disease in the stomach, and excludes implication of the small intestines. 2. In great anemia, and even cachexia, with idiopathic disease of the stomach, hyperacidity of the stomach is very probable. Seventy-five cases of anemia were found in 188 dyspeptics, and sixty of these had great hypersecretion. Hypersecretion is generally accompanied by anemia, and in some cases of very grave anemia the digestive power of the juice was remarkably great. 3. Vomiting occurs usually in persons having no deficiency of HCl. 4. With great tenderness of the epigastrium deficiency of acid is not probable. 5. Preponderance of nervous symptoms is usually accompanied with increased digestive mechanism. Of 188 cases, in 99 there was a preponderance of nervous symptoms over those referred to the stomach, in 62 of these there was hyperacidity or hypersecretion, 23 a normal secretion, 8 deficiency of acid, and in 6 total failure of secretion. In 9 cases remains of food in the stomach after the normal period called forth severe nervous symptoms. The consideration of nervous symptoms, to the neglect of the internal examination of the stomach, is very likely to mislead. 6. An excessive feeling of thirst almost always points to great hypersecretion, which is usually combined with

mechanical insufficiency or ectasia. 7. Sour eructations point to an acid condition of the stomach. 8. In excessive eaters who seem to have a false appetite, hyperacidity and hypersecretion with mechanical insufficiency, or moderate dilatation, is met with. The state of the appetite gives no guide to the state of the secretion or mechanism of the stomach, for of 38 persons in whom there was an absence of appetite, 16 had an excessive and continuous HCl secretion. 9. Cramp of the stomach is generally accompanied by great hyperacidity. 10. The feeling of aching in the stomach points to an extensive irritation of the stomach by hyperacid secretion, and the presence of numerous cell nuclei. 11. In slight degrees of dyspepsia a high degree of acid hypersecretion is not probable.—*Med. Chron.*

Heredity of Cancer of the Breast.—In the report of the Committee on Collective Investigation of Disease, presented at the last meeting of the British Medical Association by Henry T. Butlin, one of the questions discussed was that of heredity. After a careful study of the data accumulated, Mr. Buntlin concludes as follows: "I confess that when I first proposed the subject of the inheritance of cancer, for collective investigation, it was with a very small belief in the reality of inheritance, and with a strong belief that the inquiry would result in such a failure of evidence as to diminish largely the impression which prevails that cancer is due in part to the influence of inheritance. I am forced to own that the mass of evidence which has been accumulated by the inquiry has led me to take a different view. The number of instances in which there is a history of cancer in the direct line of descent, the manner of the relationship in those families in which more than one of the patient's relatives were the victims of cancer, and the very strong probability that the case is throughout under rather than overestimated, are, to my mind, proofs which cannot be resisted. Compare this evidence of the influence of inheritance with that on which some of the undoubted causes, whether exciting or predisposing, rest, and the balance is largely in favor of inheritance. What is more certain than the predisposition of the breast and uterus to cancer, yet probably not more than one in fifty (2 per cent.) of the adult women who die, dies of cancer in the breast or uterus. Injury is admitted on all hands to be the cause of cancer, yet Gross finds that only about 11.70 per cent. of the large number of patients in his collection attributed the occurrence of the disease to injury. Our returns show that there was a history of cancer in the direct line of descent in 20.60 per cent. of the cases; and, if only the fathers and mothers of the cancerous patients are considered, that there was even then a percentage of no less than 16.84.—*Br Med. Jour.*

Thallin in Typhoid Fever.—The introduction of such drugs as "kairin," "antipyrin," and "antifebrin" has somewhat diverted attention from a very powerful antipyretic agent—viz., thallin. Professor Ehrlich lately presented to the Clinical Society of Berlin the results of some researches he has been making with this last named agent, especially in the treatment of typhoid fever (*Münch. Med. Woch*). From experiment, he found that after administering the drug to animals it was not retained in the nerve centres, but mostly in the fatty tissue of the body. He also found that there was a marked difference in toxic action, according as to whether it was administered by the mouth or subcutaneously, the greater inertness of its effect in the former case being attributable to the hindrance to absorption from the presence of intestinal contents. The lesions induced by a toxic dose comprise fatty degeneration of the kidneys, necrosis of the salivary glands and pancreas, and hemorrhagic infarcts in the pyramids. The chief action of thallin is antipyretic, but it is capable also of moderating inflammation. As regards typhoid fever, it was administered by Ehrlich in two different ways. The first plan consisted in commencing with doses of 0.06 gram. every hour, and reducing the dose to the minimum required to give any effect. The other plan was to commence with a minimum dose, and increase it until an effect was produced, and then to continue the prescription at the dose thus attained. The action of thallin is especially noticeable in its effect on the sensorium and general condition of the patient, who presents the appearance of convalescence, whilst the splenic swelling and roseola are still present, and if the drug be discontinued the temperature will rise again. It is not therefore surprising to learn that whereas the twenty-eight cases treated by bathing, the average stay in the hospital was thirty-seven days, of seven cases treated by thallin (minimum doses) the duration of treatment was forty-seven days and cases on a scale of progressive doses thirty-eight days. However, Professor Ehrlich claims advantages for the drug in the absolute control it exerts over pyrexia, and the sense of well being enjoyed by the patient. There were no intestinal hemorrhages in these cases, and no instance of perforation. The kidneys were not affected, but sequelæ in the form of hyperæmia and œdematous swellings seem due to the use of the drug. It was not thought that thallin had any specific action against the typhoid bacillus, but it did seem to limit the degree of intestinal ulceration. Prof. Ehrlich considers it to be on a level with the bath treatment. Dr. Frankel pointed out that if the statement was correct that thallin is not found in the nerve centres, its action in reducing temperature was rather inexplicable. He had exhibited it in increasing doses, but could not

say that the patients experienced any special benefit attributable to the diminished fever. Dr. Guttmann was not favorably impreseed by its use, and had noted the production of rigors.—*Lancet.*

Some Points in the Pathalogy and Treatment of Fever.—At a meeting of the Manchester Medical Society, Dr. James Niven read a paper on the above subject. The points considered were formulated in four propositions :

1. Self-protective fevers tend to become milder the longer they are settled in a community. The protection conferred was regarded as an adjustment of the tissues, which would be handed down from generation to generation in the case of any disease which was spread over the greater part of a community. In co-operation with this adjustment is the elimination by death of people especially liable to the disease. In opposition to it is the tendency of children to take disease in the same manner as the parent. As illustrations were considered typhoid fever, measles, small-pox, yellow fever, and syphilis.

2. The second proposition was that the phenomena of fever are probably due in the main to chemical poisons. It was attempted to be shown that chemical matters secreted by the fungi or dead fungi, were sufficient to account for the phenomena of fevers, while in some disease it was taken as proved that only chemical poisons were admitted into the circulation.

3. The third proposition was that the nervous system is the liberator and controller of heat and fever. It was contended that a large amount of heat was due to metabolism of muscles, but the experiments of Pflüger and Samuel had shown that muscle, under normal circumstances, underwent this metabolism as the effect of nervous impulses. While admitting the vaso motor system and heat inhibitory centres as probable causes of some pyrexial conditions, it was suggested that excitation of the anterior cornual cells in the spinal cord, and of their congeners in the medulla and brain, would better explain the pyrexial conditions of such fevers as typhoid and typhus. Reasons were given for regarding the figures arrived at by Dr. Burdon Sanderson, from calculation of the excreta in health and in fever, as showing an increase in fever of heat requiring to be eliminated.

4. The fourth proposition was that the proper treatment of fevers is partly dietetic, partly calmative. The treatment on these lines was sketched. Easily assimilable materials, such as peptonized meat and milk, and sugared fruit are necessary to maintain the strength, to prevent complications and tropho-neuroses ; perforation in typhoid may be regarded as in part a tropho-neurosis. Calmative treatment, such as a skilful nurse, free from fuss, removal of irritations, and antipyretic treatment, are necessary for the same objects. Antifebrin was regarded as, perhaps, the best antipyretic.—*Brit. Med. Jour.*

Oil of Sandal-wood in Fœtid Bronchitis.—In a clinical lecture on a case of fœtid bronchitis, simulating abscess of the lung, Professor Da Costa showed a male patient of 32, who had been admitted into the hospital about a month before for cough and profuse expectoration, sometimes bloody and offensive. He had emaciated greatly, and complained of poor appetite, diarrhœa, vomiting, frontal headache, and night sweats. Upon examination, some dulness on percussion was found about the middle of the left lung posteriorly, and moist *râles* and faint pectoriloquy could at times be obtained. The man had been in the hospital three months previously in a very similar condition, and so great at that time was the amount of the expectoration, containing masses of purulent matter, that the idea of abscess of the lung was entertained. He was somewhat benefited by treatment, and went out, only to return with the same symptoms : indeed, there was no evidence that they had ceased from the time that he was in the hospital. When he returned, there were found again the cough, fœtid expectoration, nummular sputa, emaciation, sweating, a slight rise of temperature (100°), and pain in the left side. The expectoration amounted to a pint and a half in twenty-four hours, and was occasionally blood-streaked. No bacilli nor elastic tissue could be found in it. The patient was submitted to systematic treatment, and carefully-regulated diet. He was given carbolic acid, and subsequeutly terebene, by inhalation, and other agents ; but none of these, tried and re-tried, gave any enduring results. Dr. Da Costa then placed him upon the oil of sandal-wood, at first five minims three times daily, and afterwards five times daily. The results were most striking. After about a month's treatment the expectoration almost ceased—falling to one drachm in twenty-four hours. The dulness at the lower part of the lung was no longer to be perceived, his breathing was better, the *râles* had disappeared, and there were no physical signs other than a little harshness of breathing at the point indicated. Dr. Da Costa did not think that in this case there was really an abscess, but bronchitis with dilatation and accumulation, simulating an abscess. He wished especially to insist on the value of the oil of sandal-wood as an agent acting decidedly upon the mucous membrane of the bronchial tubes. Its effects upon other mucous membranes, as in the .genito-urinary tract, first led him to use it for the condition of bronchorrhœa. It had afforded great relief to such cases in his hands. He might say that the present case was cured by the oil of sandal-wood.—*Phila. Med. Times.*

Nitrite of Amyl in After-pains and Dysmenorrhœa.—Mr. F. W. Kendle, of South Molton, reports the case of a lady who complained to him, the first day after delivery, of excruciating after-pains, which she declared were worse than any she had experienced during the labour. The womb was found firmly contracted; loss was slight; and no clots larger than beans had been passed. As several hours must necessarily have elapsed before any medicine could have been sent her, Mr. Kendle broke a couple of nitrite of amyl capsules (four grains in each), into a smelling-bottle, and directed the patient to take two or three deep inhalations when she felt a pain coming on. The effect was simply magical: the pains were immedietely relieved, and shortly ceased altogether, the patient being soon able to take some refreshing sleep. She made an excellent recovery. He has since tried the same remedy in two other cases of less severity, with similar results. He has also found the drug invaluable in the sickness of pregnancy, and in obstinate cases of dysmenorrhœa. Inhalation seems to be more certain and lasting than the internal exhibition of the drug. He strongly recommends this as a simple and efficacious plan of treatment.—*Lancet.*

Decoction of Cotton-Root as a Hæmostatic.—Having repeatedly tried cotton-root, in form of a fluid extract, as a uterine hæmostatic without marked beneficial results, our conclusion was that the remedy was without any great value The experience of Dr. Garrigues, Clinical Society of the New York Post-Graduate Medical School and Hospital, proves that the drug given in the form of decoction produces markedly beneficial results. The following are his directions for preparing and administering it: Three heaping teaspoonfuls of the powdered root are boiled in a pint of water for fifteen minutes; after cooling, the preparation is strained; one-third of the decoction is taken in the forenoon, another in the afternoon, and the last at bedtime.

Dr. Garrigues has used the remedy in 139 patients, and in the great majority of cases with more or less decided benefit. He has found that it checks the bleeding from uterine fibroids, and also lessens the associated pain; while in sarcoma and carcinoma it limits, or altogether suspends, for a time, hemorrhage. He insists that the remedy should be used in the form of a freshly-made decoction, and states that it fails to produce any benefit in about one in ten cases, which is certainly not an unsatisfactory showing.

The attention of the profession will doubtless be directed anew to the use of this remedy by the important and apparently conclusive results obtained by Dr. Garrigues, who, as is well known, is one of our most capable and conscientious observers.—*Med. News.*

Treatment of Boils by Injections of Carbolic Acid.—Dr. Bidder, of Paris, has described a method of treating furuncles by parenchymatous injections of carbolic acid. If the boil is a small one, he gives one injection of a few drops of a solution of carbolic acid (2 per cent.); if it is of medium size, two injections are given, the half or the whole of a Pravaz-syringeful of the solution being used on each occasion. In the case of large furuncles, for example, half the size of a man's hand, Dr. Bidder injects at four different spots the contents of four Pravaz-syringes half or wholly filled with a solution of 2 per cent. of carbolic acid. These injections are given only once. This treatment is strikingly successful. There is some smarting at the seat of injection at first, but the pain soon disappears, and the next day there is a marked improvement in the patient's condition. The inflammatory swelling subsides very quickly, and in eight or ten days even the largest furuncle is dispersed. By this plan no unsightly scars are left, a circumstance, which in many cases is of considerable importance. The success of the treatment is probably to be accounted for by the fact that either the microbes which cause the disease are killed, or the medium in which they flourish is destroyed—*Brit. Med. Jour.*

Nitro-Glycerine in the Treatment of Epilepsy.—A girl, fifteen years of age, of bad family history—her mother and grandmother having died insane,—had been a sufferer from epilepsy for two years. Her general health was good and her menstrual functions properly performed.

I saw her first November 1, 1885; she was then having convulsions almost every day, and sometimes twice in twenty-four hours. The bromides had been faithfully tried, with but partial relief. She was at once placed upon nitro-glycerine, one drop of a one per cent. solution being given her three times a day. She had a convulsion on November 9, 1885, and did not have another until November 1, 1886—the nitro-glycerine having been continued without intermission during the whole of this time. On November 13, 1886, I saw this young lady again; she had then had two slight convulsive seizures and had on several occasions been "dazed," as she expressed it. The dose of nitro-glycerine was increased to one drop and a half three times a day, and she has had no return of either the convulsions or the "dazed feelings" since.

In view of the fact that the *hygienic* management was precisely the same before and during the administration of the nitro-glycerine, it seems fair to attribute the benefit in this case to its use.

In another case the convulsive seizures were kept under control for some weeks; but it was impossible to induce the parents of the patient in this case to persist in the use of the remedy, they

having been taught that epilepsy was incurable. In several other cases which have fallen under my observation there has been improvement, but there has not yet been a sufficient interval of time since the treatment was commenced to say what the ultimate result will be.—*N. Y. Med. Rec.*

Cocaine Dosage and Cocaine Addiction.—The author, upon data derived from a large personal experience and from an extended correspondence on the subject, concludes as follows:

"I think cocaine for many, notably the large and enlarging number of opium and alcohol habitues, the most fascinating and seductive, dangerous and destructive, drug extant; and, while admitting its great value in various disordered conditions, earnestly warn all against its careless giving in these cases, and especially insist on the great danger of self-injecting, a course almost certain to entail added ill.

"To the man who has gone down under opium, and who thinks of taking to cocaine in hope of being lifted out of the mire, I would say, 'Don't,' lest he sink deeper. I have yet to learn of a single instance in which such an effort reached success; but know many cases where failure followed, or, worse, cocaine or coca-morphia addiction. The need of caution against free and frequent using obtains in other cases, for there may come a demand for continued taking that will not be denied. Cocaine can be toxic, sometimes deadly, in large doses. It may give rise to dangerous or even fatal symptoms in doses usually deemed safe. The danger, near and remote, is greatest when given under the skin. It may produce a diseased condition—in which the will is prostrate and the patient powerless—a true toxic neurosis, more marked and less hopeful than that from alcohol or opium. Such being my belief, I regard Dr. Hammond's statements mistaken, and his conclusions rash and dangerous."—*Med. Reg.*

Infantile Constipation.—A very successful remedy for this is podophyllin, in small doses; iridin may be combined with it with good effect. Make a tincture of the following: Podophyll. resin, gr. viij.; iridin, gr. v.; spt. ammon. arom., ʒj. Digest for several days, and filter. From one to two drops of this may be given at bedtime on a small piece of loaf-sugar, or the dose may be combined in mixture alone with syrup of orange. This is the dose for a child of one year and under. —*Med. Rec.*

Treatment of Worms.—Chloroform has been found very efficient against tape worms. Doses of 30 drops had been given every twenty or thirty minutes. Troublesome cardiac symptoms can be avoided by giving much smaller doses (a few drops) every few minutes for a few times. Thompson successfully prescribed chloroform ʒj (by weight) and simple syrup ℥j, to be given in three doses at intervals of two hours.—*London Med. Rec.*

A Sudden Bleaching of the Hair, which has been known to take place almost instantaneously from fright, must consist in withdrawing of the protoplasm of the hair back into the blood-vessels of its bulb together with the pigment, somewhat as the protoplasm of a dying leaf which whitens on the twig migrates through the cells of that leaf to the branch which sustains it. And this process is better seen yet in the slow discoloration of bulbous plants like the onion and the turnip during their first year while ripening in the garden.—*Am. Jour. of Biology.*

One day Frederick the Great said to his physician, "How many men have you killed in your practice, doctor? Speak truly!" and the doctor answered, "Sire, almost three hundred thousand less than your majesty!"

The Senates of the Trinity Medical School, Toronto, the Western Medical College, London, and of the Royal College of Physicians and Surgeons, Kingston, have had under consideration matters appertaining to the new medical school which it is proposed to found in connection with University of Toronto. The new school appears to be a revival of the old Toronto School of Medicine, The principals of it conceived the idea of not only affiliating with the provincial university, but of making use of its splendid equipment, ... In all the discussions that have occurred in regard to college federation it was contended that professional education should not be facilitated at the cost of the people, and yet, unless we have a misconception of the latest college scheme, that is just what is now being proposed. It is stated that the standard of education in connection with the new medical school will be higher than that of any medical school in the country, and towards it certain professors of the university will contribute without extra fee from the students so far as they are concerned. The people in that event would be paying for instruction which should be borne by those expressly benefitted by it.

That the medical colleges of Ontario—Trinity, of Toronto, the Western, of London, and the Royal of Kingston—will protest vigorously against the scheme of the Toronto School of Medicine we have no doubt; and we cannot believe that to them the minister of education will turn a deaf ear. Schools for the instruction of students in professional subjects have no claim upon the public bounty, and assuredly there is no call for one being assisted into life and usefulness at the expense of the others and of the whole people.—*Brit. Whig.*

THE CANADA LANCET.

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TORONTO, JULY, 1887.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

REPORT OF THE BRITISH COMMITTEE ON THE PASTEUR SYSTEM.

In April, 1886, a committee, consisting of Sir James Paget, Sir Joseph Lister, Sir Henry Roscoe, M. P, Dr. Richard Quain, Dr. Lauder Brunton, Prof. Burden Sanderson, and Dr. George Fleming, with Mr. Victor Horsley as Secretary, was appointed by the then president of the Local Government Board to enquire into M. Pasteur's treatment of hydrophobia. On June 28, 1887, this committee presented its report to the British Parliament. The time occupied in the investigation has been long, but when we consider the magnitude and importance of the work necessary to be performed before a satisfactory report could be framed, it is rather surprising that it has been accomplished with so much expedition.

The evidence which was at the committee's disposal at the Pasteur institute was first examined, and then the results said to have been attained were verified by independent investigation. The various members of the committee have worked with great assiduity since their appointment, the work being divided, as follows:—Sir Henry Roscoe, Dr. Burden Sanderson and Dr. Lauder Brunton studied the process in Paris. After their return, Mr. Victor Horsley performed a number of experiments, and the other members of the committee came to a conclusion on the facts submitted to them.

The opinions (formed mostly in ignorance) of medical men all over the world, have been so diverse on this subject, that it is a matter of extreme congratulation that a definite conclusion has been arrived at by such a body of men as those mentioned above, and this after mature deliberation, and after having eliminated, as far as possible, all sources of error or doubt in their experiments and investigations. The original claim of Pasteur, that he could, by inoculation, protect a man or animal from the risk of contracting hydrophobia, after having been bitten by a rabid animal, has been fully tested, and the committee reports that "it may be deemed certain that M. Pasteur has discovered a method of protection from rabies comparable with that which vaccination affords against infection from small-pox."

The importance of this endorsation of Pasteur's views can scarcely be estimated. It shows that this new method of inoculation may be used to protect men and animals against the most potent virus.

The more important matter of the prevention of symptoms in persons already bitten, is unfortunately, not so definitely understood; of course, the conditions under which such patients came under treatment, vary widely. Thus, the questions whether the dogs inflicting the wounds were really rabid, the number and extent of the wounds made, the fact of some protection against the introduction of the virus by clothing, the amount of bleeding which occurred, the difference in the intensity of the virus of different species of animals, and various other factors, rendering a definite conclusion almost impossible at the present time. But the whole evidence, which has been sifted most carefully, goes to show that it is certain that the treatment of Pasteur has prevented the occurrence of the disease in a large number of those who had been bitten, and who, without such treatment, would have died of hydrophobia.

As to the question of the danger arising from inoculation, which Pasteur's opponents have held to be as great as that of the bites of rabid animals, the verdict goes entirely in favor of Pasteur, and that, while under the intensive process at first employed, there were some untoward consequences, "the method now employed is free from serious danger." The practical outcome of the report is that, by stringent police regulations, the disease may be greatly diminished, and the committee

suggest the following as presumably effective :— (1.) The destruction of all wandering, ownerless dogs. (2.) The discouragement of keeping useless dogs, by taxation or other means. (3.) Prohibiting importation of dogs from countries where rabies is prevalent, or the imposition of quarantine. (4.) Compulsory muzzles in districts where rabies is prevalent.

OUR MEDICAL COUNCIL.

In one of our city dailies, following the list of members of the medical faculty of Toronto University, it is suggested that the degree of M.D. of Toronto University be accepted as a licence to practise, thus ignoring the most vital *raison d'être* of our Council. Can anyone suggest for a moment that the graduates (who are to be) of Toronto University, shall be set down, as so far above those, of say, Queen's or Trinity, that they shall be granted immunity from passing the Council examinations? Such suggestions are utter nonsense. Grant such power to Toronto, and every other university in the Province *must* insist on equal rights, and our Council's "occupation's gone." It is a good thing to know that the standard of the new (?) school is to be so high that we shall need no further guarantee of the thoroughness of the training given to their students. Modesty is an excellent thing, and we admire the very modest tone which pervades this article, which was, we assume, inspired by one of the new faculty. This new faculty is to be *facile princeps*, though its members have been named only a few days ago.

Such a concession to Toronto University would simply have the effect of throwing us back to the days before the Council was called into existence. There being no central examining body, or at least each University having the power to grant a licence to practise, cheaply won degrees would naturally follow, for wherever degrees could be most easily obtained, there would the great bulk of students find their way.

"The Medical Council," says the writer of this article, "did excellent work *in the past*," *but in view of the great facilities which the medical faculty of the Provincial University will have of imparting a high order of medical education, the students of the latter ought to be exempted from further examination than that provided by their own college.*—(The Italics are our own).

This would be equivalent, as we understand it, to the entire subversion of the Council, a proceeding which we are sure will meet with the almost unanimous opposition of the profession. Our Council was not, when first instituted, a body of which we could be proud, and the old adage of "give a dog a bad name," etc., is quite as true of a corporation as of an individual; yet, so high has been the character of the men who have composed the Council for some years past, and who now compose it, that they have succeeded in gaining the respect and confidence not only of the profession, but of the public at large. It has done and is now doing an excellent work, a work which the profession cannot afford to have discontinued, and we are sure that the profession will see that it will not be snuffed out in any such free and easy way as is suggested by the writer of the article above alluded to. The questions of June examinations, and of the absorption of the Council (as examiners) into the new faculty, as suggested in the same article, are important ones, but space forbids any further reference to them at present.

THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

A number of prominent medical men in Ontario have recently devised a scheme for the formation of a Medical Library for the Province. The idea is a good one, and, we believe, requires only to be brought before the notice of the profession to receive a hearty support. The object is that a reference Medical Library be formed, not for Toronto, but for the Province, and Toronto being the most central point, has been chosen as the most convenient situation for this much-needed institution. The proposed scheme is that a joint stock company be formed, with a capital of $10,000. The shares are to be $5 each; and it is proposed that the payments shall be extended over a period of five years. So far, about $2500 has been subscribed, and the organizers feel much encouraged by the many proofs they have already had of the feasibility and popularity of the scheme. It is hoped that the list of books may, from time to time, be augmented by donations from physicians, who

may leave their libraries to the institution, as well as from publishers and authors. Already has the veteran physician, Oliver Wendell Holmes, in answer to a letter addressed to him by Dr. Powell, of Toronto, signified his intention of presenting a copy of his medical works, bound in any way the trustees may suggest.

There are in Ontario over two thousand practising physicians, and they are, as a rule, reading men, or at least the number of reading men among them will, we believe, compare favorably with that of any other two thousand practitioners in the world. Now, such a scheme as we have outlined, will provide a convenient reference for medical men all over the Province, a matter of great importance to every practitioner, and especially to those who are preparing papers, etc. It is hoped that within a year from the present time, a library of from four to five thousand volumes will be in existence here, and that the principal medical journals will be accessible to all wishing to consult them. It is very gratifying to know that the Ontario Medical Council has so heartily entered into the scheme and have shown the appreciation they have of such an institution, by renting to the Association, at a nominal figure, a room fitted with shelving, etc. The generous spirit in which they have thus met the organizers will, we feel certain, call forth sentiments of approval from the whole of the profession throughout the Province, The following are the officers: President, Dr. J. E. Graham, Toronto; Vice-Presidents, Drs. Arnott, London; Burns, Toronto, and Henderson, Kingston; Treasurer, Dr. McPhedran, Toronto; Curator, Dr. Powell, Toronto; Secretary, Dr. D. J Gibb Wishart, Toronto. Trustees, Drs. Mullen, Hamilton, Pyne, O'Reilly, and Nevitt, Toronto.

British Medical Association.—A branch of this well-known and influential Association has been formed in Halifax, Nova Scotia. It is to be called the Nova Scotia Branch of the British Medical Association. This Association's branches now cover the United Kingdom, and exist also in India, Ceylon, Australia and other colonies. A branch has been lately started in Bermuda. It numbers, all told, some 12,000 members. It has a parliamentry committee whose duty it is to supervise all legislation interesting the profession, and its voice has lately been heard with effect in altering and amending the new warrent regarding relative rank in the Army Medical Department. By meetings of local branches and an annual general meeting, held in different cities of the United Kingdom, it draws medical men together, promotes *esprit de corps* amongst them and, by concentrating their voices, gives to the medical profession that influence in social and scientific matters to which that intelligent and benevolent body is justly entitled. This is the first branch of the Association formed in North America. Dr. Tobin, of Halifax, has been earnest in promoting its formation, and, on Monday night, at a large professional meeting, held at his residence, it was formally organized, as follows:

President—Deputy-Surgeon-General McDowell, C.B., A.M.S. *Council*—Fleet Surgeon Swetenam, Royal Navy; Dr. Slayter, Dr. Black, Dr. Wickwise, Surgeon-Major Bolster, A.M.S.; Dr. Tobin, *Hon. Sec.*

Brown Bread.—Dr. Geo. D. Hays, of the New York Post Graduate School, writing in the *Quarterly Bulletin*, says: "We have long been accustomed to hear that many of the evils of modern life owe their origin to our choice of *white* flour. That this is not so, an examination of the wheat-berry will show. This has five coats—an epi-, meso-, and endocarp, an episperm, and a tegmen. The three outer ones have no value whatever as nutriment. Within the episperm is a layer of gluten-cells, chiefly albuminoids, and, finally, in the endosperm, which constitutes the bulk of the grain, we find starch mixed with albuminoid cells. In the old process of milling, the perisperm (the part within the episperm) was, on account of its close attachment to the inner husk, largely carried away, leaving the bolted flour the poorer for its loss. Hence the vegetarian, Sylvester Graham, whose name is applied to bread made from unbolted flour, was correct in his time in saying such bread contained the most nutriment. The present 'gradual reduction' process saves this portion of the wheat. The bran itself is composed of woody fibre, and contains absolutely no nutriment. It may have a mechanical value in those of a constipated tendency, but this is all. The wheat loaf and the white flour contain a much larger percentage of phosphates and gluten than the Graham loaf or unbolted flour."

Canadian Medical Association.—The twentieth annual meeting of the Canadian Medical Association, will be held in Hamilton, on August 31st and Sept. 1st. The following discussions will be held :—On "Empyema," by Dr. McPhedran, of Toronto; "Subinvolution of the Uterus," by Dr. Eccles, of London; "Present state of Cardiac Therapeutics," by Dr. Stewart, of Montreal; Dr. William Osler, Philadelphia, "The Cardiac Relations of Chorea"; Dr. T. Wesley Mills, Montreal, "A Physiological Basis for Improved Cardiac Pathology"; Dr. Arch'd Malloch, Hamilton, "Report on Twenty Cases of Tracheotomy in Diphtheritic Croup"; Dr. William Gardner, Montreal, "A Years's Work in Abdominal Surgery"; Dr. Ryerson, Toronto, "Ophthalamic Epilepsy"; Dr. Buller, Montreal, "Headaches in Connection with Certain Ocular Defects"; Dr. Stirling, Montreal, "A Few Points in the Etiology and Treatment of Strabismus"; Dr. W. H. B. Aikins, Toronto, "The Detection of Typhoid Bacilli in Drinking Water." The surgical discussion will be opened by Dr. Grasett, of Toronto. The following are the officers of the Association for the present year :—President, T. K. Holmes, M.D., Chatham; President Elect, J. E. Graham, M.D., Toronto; General Secretary, James Stewart, M.D., Montreal; Treasurer, Charles Sheard, M.D., Toronto.

Cocaine Poisoning.—The frequent reports of unpleasant and even fatal symptoms supervening upon the administration of cocaine in even small doses, should lead practitioners to exercise due care in the use of an agent, which, after all, seems to miss in its specific action about as often as it hits. The following case from the *Centrbl. Fur. Chir.* is one in point. The amount used was a grain and a-half, injected subcuntaneously, in a patient æt. 57 : Three-quarters of an hour after the injection the limbs of the patient were without sensation, the pupils were much contracted, and the pulse was rapid. Two hours later the pupils were abnormally dilated, the heart was beating violently, and the secretion of urine was very much increased. The skin was constantly cold, and there was difficulty in swallowing, with cessation of the secretion of saliva, heavy breathing, and complete sleeplessness for thirty hours. The attack returned after the main symptoms had passed away, first, after two days and again at the end of a week.

Treatment of Aneurism.—At the May meeting of the American Surgical Congress at Washington, Dr. T. G. Richardson read a paper (*M d. News*) on the Treatment of Aneurism, in which he gave a case of cure of aneurism of the femoral artery by suspending the limb flexed at right angles at the hip and knee. The tumor was of the size of a goose's egg, irregularly flattened, and wanted none of the characteristic signs of aneurism. The patient was a shoemaker, 55 years old, anæmic and delicate, and had contracted syphilis nine years before. On the first day the Dr. found an improvement in the condition of the tumor, coagulation had taken place in a few days, and in a week later the patient was dismissed cured. After a few months nothing remained to mark the site but a small nodule. The writer drew attention to the fact that no pressure was exercised on the tumor, and believed that the cure was entirely effected by flexion and suspension of the limb, and especially the latter, under the action of gravity.

Illness of Professor Billroth.—It will be of interest to our readers to know that the disease, which so nearly carried off one of the brightest lights in the profession was acute pneumonia, which supervened upon an attack of bronchitis. Von Bamberger and Nothnagel were in attendance. The patient received the greatest benefit from inhalations of pure oxygen which was prepared daily. Under this treatment (*Br. Med. Jour.*) the dyspnœa diminished, the pulse became stronger, and consciousness gradually returned.

Nasal Hemorrhage.—Plugging the posterior nares is not necessary, until the simpler method has been tried of firmly grasping the nose with the finger and thumb, so as to prevent any air from passing through the passage. Jonathan Hutchinson says he has never seen a hemorrhage from the nose which could not be checked by immersing the feet and legs up to the knees in water as hot as it could be borne.

Medical men wishing to attend the coming International Congress, at Washington, should send their names to Dr. J. E. White, 185 Carlton St., Toronto, who is making arrangements by which a Pullman car shall be secured at cut rates, to run through to New York, Philadelphia and Washington.

Repeated Attacks of Typhoid.—The Switzerland Correspondent of the *Brit. Med. Jour.* writes:

Prof. H. Eichhorst, of Zurich, relates the case of a woman who had three attacks of typhoid fever: one in 1882, another in 1884, and a third in 1886. A similar case, occurring in the person of a trained nurse, is mentioned by Dr. Herman Mueller, who, moreover, himself passed through four distinct attacks of the disease; one of these was severe, but the others were only *typhus levissimus*. Dr. Mueller's two brothers had each two severe attacks of typhoid fever in the course of a year; one of them succumbed to a second attack.

For Detecting Urine at the Bedside.—The following should be useful for the above purpose. We take it from the *Canadian Pharm. Jour*:

1. Perchloride of mercury . . 1 gramme.
   Distilled water . . . . . 20 grammes.
   M ft. solution.
2. Iodide of potash . . . . 1 gramme.
   Distilled water . . . . 2 grammes.

Mix these too solutions, and then dip leaves of Joseph paper in the mixed solution, you then dry the paper and cut it into strips. To analyse a urine, all that is necessary is to plunge a small strip of the paper as prepared above and if the urine contains albumen, it will be at once precipitated. To render the urine acidthe Joseph paper, can be prepared by impregnating it with a solution of citric acid.

The Antiseptic Power of Vinegar.—Englemann (*Arch. Gen. de Med.*) has been experimening upon the antiseptic power of vinegar, having used it in diphtheria with better results than were obtained from the use of any other agent. He used either ordinary vinegar or the officinal acetic acid, applying it by means of a brush, or as a gargle. In the latter case, he added double the quantity of water. He found that its power to prevent the growth of bacteria surpassed a 5% solution of car bolic acid.

Gleet.—Dr. Fred A. Smith, writing to the *Brit. Med. Jour.* says, he has used an injection of acid, nit. dil. ♏v. decoct. cinchon. flav. ʒi., with the happiest result. He stumbled upon the treatment through the mistake of a patient.

Ol. Pini Sylvestris in Chronic Bronchitis.—A. W. Robson (*Brit. Med. Jour.*) notes some excellent results in the treatment of chronic bronchitis with 5 min. doses of the above every 4 hours. Out of 94 cases, only one failed to improve in some of the symptoms. It sometimes produced scalding urine and frequent micturition.

Dr. Robin, whose name is so familiar to medical men the world over, has recently been elected a member of the French Academy of Medicine. He is only 38 years old, and is the youngest member of that famous institution. It is stated that he has not lost a single patient out of 1200 typhoid fever cases.

Sir William Gull, has lately made some severe strictures on the wholesale pouring in of drugs, so common by the general practitioner.

Large Fee. — Dr. Anderson Crichet, lately received a fee of $40,000 for visiting and treating an Indian prince.

Dr. Knight of Dublin, in 1883, took 131·25 grs. of quinine in twenty-four hours. This is said to be the greatest amount ever taken. We doubt it.

Dr. Morell MacKenzie, says that the German crown prince is cured.

Books and Pamphlets.

A Practical Treatise on Obstetrics. Vol. IV. Obstetric Operations. The Pathology of the Puerperium. By A. Charpenter, M.D., Paris. Illustrated with lithographic plates and wood engravings. This is also Vol. IV. of the "*Cyclopedia of Obstetrics and Gynecology*," (12 vols.), issued monthly during 1887. Price of the set $16.50 New York: William Wood & Company.

William Wood & Company seem never to tire. The fourth volume of Charpentier's Obstetrics work is now before us, constituting the seventh part of the treatise, the merits of which it well sustains. Twelve chapters are devoted to obstetric operations of every imaginable form. The plates number no less than 192, showing every possible, with perhaps a few impossible, positions and presentations, the study of which may be rather more perplexing to the junior students than practically instructive. But though it may fortunately fall to the lot of only a trivial propor-

tion of obstetrics practitioners to encounter but a small per centage of the formidable cases depicted on the plates, it is well to know that such things have been, and thus to avoid the rash conclusions which impels young obstetricans to rush into print. It will be well, too, that the uninitiated should not be frightened by inspection of the luxurious armament of obstetric contrivances exhibited in the work, otherwise they may conclude that midwifery is an art quite beyond their hopes of achievement. It is, in Canada, a pleasing fact that the female pelvis and the fœtal head are mutually well proportioned. Canadians have not yet reached that degree of cerebral development which demands so ample a brain-case as would seem to be the order of ossifaction, obtaining in the countries furnishing the specimens from which old world obstetricans derive their models. It will be well, however, that we stand on our guard, for serious changes must be brought about by the present murderous fashion of tight lacing and peg-top high-heeled boots. By the former the abdominal viscera are crushed and squeezed down into the pelvic cavity, so as to hamper the process of utero-gestation, and thus to induce very serious fœtal malformations; and by the latter the centre of gravity and of bodily equilibration must be materially displaced, —witness the awkward hirpling gait of half the young ladies (for all now are *ladies*), who so earnestly strive to ornament our thoroughfares. Poor things! they transform themselves into wasps, but their stings are self-destructive. The compensation is that they will not capture large brained husbands.

What to do in Cases of Poisoning. By William Murrell, M.D., F.R.C.P., Lecturer on Pharmacology and Therapeutics in the Westminster Hospital, etc., etc. First American from the 5th English Edition. Edited by Frank Woodbury, M.D., etc., etc. Philadelphia: The Medical Register Co. 1887.

This work is deservedly popular on the other side of the Atlantic, and we have no doubt its success will be equally marked in America. The author goes to the point in a business-like way which is truly refreshing. The arrangement is admirable. Such sentences as, "The statement that the solution (apomorphia) should be made as required for use is all nonsense," will be encouraging to the medical man who does not carry about with him a laboratory, from which he may prepare "fresh" solutions of any known drug, at a moment's notice. In his preface the author says, "This work has reached a 5th Edition, but it is not my fault, and I disclaim all responsibility in the matter." Altogether the work is excellent, and up to the latest date, and we can heartily recommend it to every practitioner and student of medicine.

A Treatise on Diphtheria, including Croup, Tracheotomy and Intubation. By A. Sanné, Paris; translated by Henry Z. Gill, A.M., M.D., LL.D. St. Louis: J. H. Chambers & Co. 1887; pp. 656. Illustrated. Toronto: Hart & Co.

This work may be considered as the most complete which has yet appeared on diphtheria. The author has considered the history of the advances made in the study of this disease of some importance, and has gleaned the views held by the most celebrated observers since the time when Bretonneau wrote. The dread fatality of diphtheria, makes it a disease interesting in the highest degree to every practising physician. The number of deaths which have annually occurred and are still occurring from it, is altogether out of proportion to the amount of study which has hitherto been devoted to it. Whoever will read the present volume with care, and analyze the matter set down therein, must have clear ideas of the disease, and must be greatly aided in his attempts at staying its ravages. The 98 pages devoted to the surgical treatment are excellent, and will be highly appreciated by all who read them, as giving definitely the indications and contra-indications for tracheotomy, accidents, methods of overcoming difficulties, etc., matter which is simply invaluable to the inexperienced physician, and suggestive and full of thought to the most experienced. The translator has done his work excellently well, and we commend the work to the profession as the best we have yet seen on this subject.

Diseases of the Eye. By Edward Meyer, translated by F. Fergus, M.B. Philadelphia: P. Blakiston, Son & Co. 1887.

This admirable work has at last been translated into English, and very well has it been done, by Dr. Freeland Fergus, of Glasgow. The phraseology is clear and concise, and free from the awkwardness of expression which so frequently characterizes translations. The matter is excellent and up to date. We can particularly commend the article on strabismus and its treatment. The engravings in the text are good and mostly new. The colored plates are from Liebreich's Atlas, and up to the high standard of that work.

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CHARLES SHEARD, M.D., C.M., M.R.C.S.,E.

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Original Communications.

PLEUROTOMY FOR EMPYEMA, METHODS OF DRAINAGE, WITH REPORTS OF CASES.*

BY DR. N. A. POWELL, TORONTO.

From the age of the father of medicine down to a period within the recollection of most of those present, purulent pleurisies have been the despair of the physician, and have ranked among the gravest conditions in which the surgeon has been called upon to be frail Nature's helper. An early and positive diagnosis being impossible in the absence of a knowledge of aspiration, the pus in a small proportion of cases was reabsorbed, giving rise to hectic fever or septicemia. In a much larger proportion of cases perforation took place through the chest wall, or more commonly through the lung. Following spontaneous perforation the result at first was often favorable, but owing to imperfect evacuation, cures were rare, and if obtained, they were accompanied by great chest deformity. That Nature could not be trusted to effect a cure, was early recognized. The inutility of medical treatment was still more evident. Surgical aid was invoked, but disaster following pleurotomy was so mixed with the benefit sought to be obtained, that alternately this operation was abandoned and again advocated. Yet, as Douglass Powell puts it, "the prognosis without surgical help is practically hopeless."

The earliest pleurotomy of which I have knowledge as having been performed on this continent, was done by Dr. Felix Christian Spöre, surgeon to a vessel which called at Reed's Island, near Cape Cod, in 1662. He found a son of the governor of the island in a very low condition from an empyema, incised it, allowed two pounds of offensive pus to flow away, and then remembering probably the teaching of Hippocrates, he plugged the opening with lint. So immediate was the relief that the patient said he felt better than he had from the twenty purges and thirty clysters previously administered. That same evening and the following days the pus was drawn off, and the cavity cleaned by injections, and in three weeks the patient was well and able to return to business.

From German statistics, in 1876, Ewald calculated the mortality after incision in purulent pleurisy, to be from 50 to 60 per cent. , With us, I have an impression that it does not exceed 20 per cent. Possibly the recovery of all my own cases, has led me take an optimistic view of the prognosis in this exceedingly grave disease. Although I know that they are too few in number to draw any safe conclusions from, I present their histories in outline, being desirous of calling attention chiefly to the methods adopted for securing those great essentials after operation : free drainage, an aseptic condition, and the rapid obliteration of the cavity by adhesion of its surfaces.

CASE I. Boy, aged 8 years. Seen in consultation with Dr. W. H. Blackstock. Pleurotomy in 7th left interspace at mid-axillary line. Fluid thick, with large and heavy flocculi ; washed out with a 2 per cent. carbolic solution. Drainage by a large Nelaton catheter passed through a hole punched in a strip of Esmarch bandage. The bandage was doubled at the point where the catheter was drawn through, and the doubled parts were secured together by paper fasteners. The hole punched in the bandage was of such a size as to prevent the catheter being easily drawn in or out. For the suggestion of this plan I was indebted to my friend Dr. Ely, of Rochester. To the outer end of the catheter was attached a glass tube, passing through the stopper of an 8 oz. vial, and reaching nearly to the bottom of the bottle. After the operation, the boy wore this bottle in a hip pocket by day, and had it beside him in bed by night. It was kept three parts filled with carbolic solution, and changed as required. To wash out the chest, all that was necessary was to raise the bottle, when fluid syphoned into the pus-cavity, returning into the bottle when it was again lowered. For about a week this case progressed well, and then the boy

*Read before the Toronto Medical Society.

finding the tube an inconvenience in his play, pulled it out of his chest. A chill and a temperature of 104° followed, but improvement went on again when the tube was re-introduced, and within a month recovery was complete.

CASE II. Man, aged 22. Pleurotomy in 6th interspace, right side, at the anterior axillary line. Drainage as before. Irrigations carried out at home. Tube gradually shortened until the sinus closed nine weeks after operation. Lung expansion complete and chest wall normal.

CASE III. Man, aged 20. Seen after spontaneous perforation had taken place in a 5th interspace in front—the usual point for such perforation in adults. Free drainage and antiseptic irrigations led to recovery with considerable condensation of the lung, and retraction of the ribs of the side affected.

CASE IV. In all essential particulars was similar to Case III.

CASE V. Boy, aged 4 years. Empyema pointing in 2nd interspace—the usual place in children. Thorough drainage after the manner of Cassaignac for a few days. Then the upper opening was allowed to close, and the discharge was received into absorbent antiseptic pads. Gravity injections were used only when flocculi occluded the sinus. Cure complete in about seven weeks.

CASE VI. A boy, aged 17. After a pneumonia involving the lower and middle lobes of the right lung had well advanced toward resolution, a relapse took place. Marked dulness corresponding to the fissure between the two lobes involved, was noted. Two days later the presence of fluid in considerable quantity was recognized, and I was asked by my assistant to see the case. I did so, and we removed by aspiration 70 oz. of pus. Œdema of the chest wall was well marked up to the level of the 3rd rib in front. As the flat line rapidly crept up again, I did pleurotomy and and established a syphon drainage, secured as before by rubber belt. About a pint of pus was washed out daily, or ran out into the bottle, which was placed on the floor beside the bed. Chills, fever, and heavy perspiration returning, we removed the tube and sought for the cause of the septicemia. It was noticed that two entirely different kinds of pus came from the wound, one thin and not offensive flowing from a sac that could be traced straight in toward the root of the lung for quite six inches; the other thick and very offensive, coming out from the lower and back part of the pleural cavity. Passing a Simpson's sound to the bottom of this latter collection, I cut down upon it, making a $2\frac{1}{2}$ inch opening, and drawing through from one opening to the other a rubber drain. This drain was threaded with horsehair to prevent its occlusion by clots, and its outer ends were coupled together by a bit of glass tube. The single drain was returned to the upper sac, which we now recognized as being an inter-lobar one. Gravity injections were made into each cavity, one or two quarts being used daily for more than three months. If these were omitted for even two days septic symptoms returned, and they had to be resumed. At about the end of the third month a pleuro-bronchial fistula formed. Iodine solution injected into the inter-lobar sac was coughed up, but none returned by the air tubes when injected into the lower pleural sac. Recovery was reached after about six months of constant attendance.

A year later this patient was examined; his general health was good, and but slight difference was noticed in the expansion of the two sides of his chest. Air entered freely all parts of the lung on the affected side, and only the evidences of thickened pleural membrane were present.

Regarding the diagnosis of empyema, the presence of an area of flatness on percussion, and of silence on auscultation where we should get resonance and normal respiratory murmur, calls for an exploratory puncture, which can safely and almost painlessly be made by a hypodermic syringe. Should the area spoken of be found in either subaxillary space, the presumptive evidence of the presence of fluid is greatly strengthened. Indeed, a dull space here, if its upper boundary be arched toward the axilla, is strongly indicative of effusion and should be tested with the needle.

I do not think sufficient attention is given to the fact that the line which bounds superiorly the flatness, in cases of effusion into the pleural cavity, is a curved line rising highest toward the axilla, and not a water-level line. This point first observed, so far as I know by Damoiseau, in 1843, is an important one. M. Peter, of Paris, Dr. Calvin Ellis, of Boston, and others, have written upon the subject. For about ten years, that is, since the date of Dr. Ellis' paper, December, 1876, I have examined for this, and so far have found it

in all but the very largest effusions. Even these, when reduced by aspiration or absorption, have given the Ellis curve. I show you diagrams illustrating some of the curves thus made out. My own limited observations are quite in accord with those of Dr. Ellis, regarding the persistence of flatness in the sub-axillary region, after resonance had returned in the vertebral groove.

Fluid being found, its physical characteristics, its reaction with ammonia, and its microscopical examination showing the proportion of leucocytes present, will point to the line of treatment that should be followed. A notable purulency being recognized, an expectant treatment, excepting in tubercular cases, is entirely unjustifiable. We must act, and act at once, or take the responsibility for a largely increased mortality. Aspiration may be done once or twice for adults, and perhaps more frequently for children. This failing, the empyema should be treated like any other abscess, and opened antiseptically. If the fluid be thin, with few and small fibrinous clots probably present, syphon drainage by the method detailed in Case I seems to me most advisable. My own success with it may unduly prejudice me in its favor. Other men, among whom I may mention Douglass Powell, have less confidence in it. When consent to the opening of the chest by a surgical dissection, layer by layer, cannot be obtained, a large trocar may be introduced, and through it a drainage tube passed. To collect the pus as discharged, a condom has been used secured to the outer end of the tube, but I like better the plan of draining into a bottle of carbolic solution, or into abundant absorbent dressings, the best of which are of sublimate gauze with bags of German peat externally, all secured by a Martin's bandage around the chest. Oakum, on account of its cheapness, may be used for the outer layers.

I advocate the use of syphon drainage and irrigations on so long as they answer all indications. A free incision done antiseptically must not be delayed, when from any cause the plan spoken of fails. So far, I have not needed the silver tube of Lister to keep the opening pervious; any tendency to premature closure has been met by tupelo tents or uterine dilators.

Finally, permit me to state that in my opinion our success in dealing with pyo-thorax, will be in direct proportion to the use which we make of the two great factors which enable us to obtain better results, than those of such men as Dupuytren and Sir Astley Cooper. These factors are an early aspirator-diagnosis, and the application of the principles of antiseptic surgery to the operative procedures undertaken in, and to the after treatment of, these cases.

Discussion is invited upon the following, with other points :—

1. Within what limits may we trust to aspiration in empyema? Within what to syphon drainage?

2. When should through drainage be established?

3. Is there any best place at which a drainage tube should be introduced?

4. What advantages are presented by the different methods of after treatment of the opening?

5. Regarding irrigations: what solutions have proved most useful, in what quantities and strength are they to be used, and what dangers attend their employment?

6. The Ellis curve, its frequency of occurrence, its importance and its cause.

LACERATIONS OF THE CERVIX UTERI.

BY DR. FENWICK, KINGSTON.*

I have been greatly impressed in studying the subjects of Obstetrics and Gynecology, with the fact that so many contributions have come from this side of the Atlantic. McDowell did the first ovariotomy; Battey the first oöphorectomy; Hodge has immortalized his name in connection with uterine displacements, and his name will always be associated with that pessary which bears his name. The invention of the duck-bill speculum by Sims, which, by a new principle, exposed to view and allowed a more complete examination of the uterus. So great were Sims' contributions to practical gynecology that it has been said, if all he had done were suppressed, we should have retrograded at least a quarter of a century. And, lastly, Emmet has discovered a pathological factor, and invented a means of relief which is one of the many gynecological advances of the past twenty years. Dr. Thomas says, "the diagnosis and treatment of lacerated cervix is a pathological contribution which, even if this eminent

*Read before the Ont. Med. Association, June, 1887.

author had done nothing else to lay his profession under obligation, would indelibly write his name upon the records of Gynecology. No one contribution to this department which has been made in the period mentioned has exerted a more marked influence upon uterine pathology than this is now doing, and will do in the future. None will have more influence in abolishing useless and hurtful therapeutical resources."

Although laceration of the cervix was described by Dr. Bennett forty years ago, its importance as a pathological factor was only recognized by Emmet in 1862, when he at once set about a means of cure. He first published an account of his operations in 1869, but it was not until 1874 that general attention was drawn to the subject.

The existence of a laceration may sometimes be early recognized by the presence, after confinement, of an elevated temperature, indications of septicemia, the absence of milk, and a general impression that the patient is not doing well. These symptoms are due to cellulitis which sometimes occurs with a laceration of the cervix, without which it would otherwise have healed, but which causes local obstruction of the circulation, and so arrests involution and the repair of the injury. It would be well, therefore, when such a condition occurs after labor to make an examination, not immediately when the parts are so soft that the tear could not be felt, but six or eight weeks afterwards, and then by appropriate means prevent a life of suffering.

Now, while on the one hand I believe some have laid more stress upon this condition than they should, and have even operated when it was not necessary, Emmet going so far as to say that "at least one-half of the ailments among those who have borne children are to be attributed to lacerations of the cervix"; on the other hand there is little doubt that this condition is often overlooked by the general practitioner, or it is mistaken for erosion of the os (so-called ulceration), or cancer, and either improperly treated or neglected. A middle course is the safest one, and the truth probably lies in the following propositions:—1. A certain degree of laceration of the cervix is the rule in all first labors.

2. A certain number of these are entirely recovered from, or else they exist without producing any symptoms.

3. A certain proportion form important factors of disease.

It is this last class of cases that alone require Emmet's operation, and in which relief of the symptoms may be expected. The tendency then of laceration of the cervix is to heal unless either septic poisoning takes place, or the tear extends beyond the crown of the cervix into the connective tissue, the accompanying cellulitis obstructs the circulation, interferes with involution, and thus prevents repair of the injury. It is most commonly met with on the left side, probably because the vertex usually occupies the right oblique diameter; and the next in frequency is the bilateral.

When a laceration of the cervix exists, there is a tendency, especially on standing, for the uterine tissue to roll out, while the obstructed circulation, the irritation of the vagina, and the resulting subinvolution increases the laceration; and as the vaginal outlet is usually patulous—owing perhaps to the use of forceps, or traction, or the accompaniment of a ruptured perinæum—there is usually prolapse and retroversion. The reticulated mucous membrane, containing numerous Nabothian glands, undergoes cystic hyperplasia and granular degeneration, resulting in a condition closely resembling erosion (so-called ulceration,) or even cancer.

Then we have inability to walk or stand comfortably, backache, pains in the abdomen, irritability of the bladder, profuse menstruation, leucorrhœa, headache, insomnia and other nervous derangements, and lastly sterility; or if pregnancy should occur, it usually results in abortion. If, then, these symptoms which are so pronounced, can be relieved by trachellorraphy, surely a great advance has been made by this discovery, for there is little doubt that if neglected, this condition is sometimes a cause of cancer. In my own experience, which has been considerable, every case which I have operated upon has been completely relieved, and in two of them pregnancy followed, one of these having been delivered without a recurrence of the laceration or a return of the former symptoms. The method which I have employed during the past year, is to mark out the intended incision with a scalpel, then remove the angle or cicatricial plug (as it has been called) with Skene's Hawkbill scissors, then trim the edges with knife and long-handled scissors, and stitch up with chromic cat-

gut. This has the power of resisting the tissues for two weeks, and can be removed with the finger nail on making an examination after that time, up to which period there is no need of disturbing the patient, nor any danger of re-opening the wound, as there is with either silk or silver wire.

BENIGN GROWTHS IN LARYNX.*

BY DR. TOBIN, F.R.C.S., HALIFAX, N.S.

Now that the care of a royal personage, the Crown Prince of Germany, is attracting so much attention, and the selection of his medical adviser (Dr. Morell Mackenzie), has cast such a lustre on British surgery, I have thought that the details of a similar case might be interesting to those amongst you who take an interest in Laryngology.

A. C., aet. 50, a healthy looking farmer, from Antigonish county, was brought to me in consultation by Dr. Fraser, of this city, on the 22nd April, 1884. Has suffered from hoarseness, with occasional almost complete loss of voice, for some months. Attributes throat trouble to over-exercise of voice in shouting, etc., at election time.

The voice is now reduced to a mere whisper; respiration slightly impeded; no difficuly in swallowing; complains of a hacking cough, with slight frothy expectoration, at times streaked with blood; is worse in damp, cold weather. On examination with the laryngoscope, the pharynx was found slightly congested. He was a capital subject for examination and operation, by the way, as the pharynx was roomy and not over sensitive. The larynx was uniformly hyperæmic; the cords were congested and a small growth about the size of a split-pea, with a broad base, occupied the extreme edge of the right one; a smaller growth was seen in the angle of the cords, below the cushion of the epiglottis. It was decided to deaden the sensibility of the parts by the use of bromide of potassium internally, and to apply solid nitrate of silver and other astringent pigments locally. He was given ice to suck, previous to each operation, and the growths were cauterized twice daily for a week, in which time the parts had become so irritable, that the treatment had to be discontinued. He was sent home for a month, and, whilst in the country, wrote to say that after the irritation had subsided, his voice had improved somewhat.

On the 11th June of same year, he returned to town; the voice was still hoarse and brassy; the polypi were somewhat smaller; he was again put upon brom. pot. mixture (as a matter of form), and ordered to attend twice daily; at each sitting, after the larynx had become used to the passage of an instrument, the growths were seized and crushed and small portions were torn away with the forceps. Very little pain or irritation followed these operations; when the basis of the growths alone remained, these were touched with solid nitrate of silver, applied with the laryngecal porte caustique of Fauvel. All operations were conducted in a strong light, with the help of the laryngeal mirror, and generally without assistance. He left town finally on the 23rd June, the larynx a good deal congested from the frequent manipulations. I heard from him a month later, expressing himself as much pleased with the result, his voice having increased in volume and his breathing much easier. No microscopic examination of the morsels extracted was made, but the fact of the man being alive and well to-day (4 years after operation), excludes all idea of malignancy.

These benign polypi of the larynx have been defined as "tumours having nothing in common with tubercle, syphilis or cancer" (Fauvel). They are generally senile, rose-colored, varying in size from a pin's head to a chestnut, and are of different consistency. The papillomata are the commonest, but myxomata, fibromata, epitheliomata and sarcomata occur. They vary in position, but most commonly occupy the ventricles of Morgani, or the upper surfaces of the vocal cords. They are due principally to local irritation, producing chronic hyperæmia of the parts. They can only be diagnosed with certainty with the laryngoscope. They are accompanied by slow suffocative symptoms; pain and dysphagia are rare. The diagnosis lies between the benign growths and syphilitic, cancerous and tubercular deposits. The progress of the disease is slow, varying with the nature of the growth. The fibromata are the slowest, and least liable to recurrence after removal. The sarcomata the quickest and the most fatal. The tendency is to death by suffocation. Treatment is extra and intra-laryngeal. The intra-laryngeal

* A paper read before the Annual Meeting of the Nova Scotia Medical Society, at Truro, July, 1887.

method is more approved of by French and English specialists. If suffocation threaten, a preliminary tracheotomy is advisable. Operative procedures consist in tearing, crushing, excision and cauterization. Patient needs preparation — to deaden the sensibility of the parts—for which purpose cocaine serves admirably, and the larynx must be gradually accustomed to the passage of instruments. The growth is usually torn away in morsels, inflammation and absorption following. Cauterization is most useful when the growth is of recent formation, and after crushing operations. The direct application of solid caustic to the part with a porte caustique, is recommended. Crushing and tearing operations suffice for most cases, are attended with the least danger; there is no loss of blood and no liability to accidents—as when cutting instruments are used. Relapses are least frequent after these operations.

The foregoing remarks have been condensed from the written views of Fauvel, Lenox-Browne and Morell Mackenzie.

Selected Articles.

THREE HUNDRED CONSECUTIVE CASES OF HÆMORRHOIDS CURED BY EXCISION.

BY DR. WALTER WHITEHEAD.

During the first five years of my professional career, I employed the ligature in the few cases of severe hæmorrhoids that came under my treatment. I operated according to the most approved method of that time, cutting through the skin and mucous membrane, and applying the ligature to the artificially produced pedicle. The number of cases operated upon did not, perhaps, exceed a dozen; nevertheless, they were sufficient to convince me that the ligature by no means produced a radical cure. One of my patients returned almost as bad as ever, and the reports I heard of another were anything but satisfactory. Although I have rarely made use of the ligature since, I have, during the last fifteen years, frequently operated a second time on patients whose piles had been previously ligatured. In some of these recurrent cases the operation had been performed by men of eminence in this department of surgery, leaving piles so extensive that it has been difficult to believe that they had ever been subjected to a previous operation. Amongst these, one was a case operated upon by Salmon, thirty-six years ago.

After abandoning the ligature, I adopted the clamp and cautery, which to the novice appear to have such fascinating advantages. For eight years I treated all my cases in this manner, and I devoted a considerable amount of attention during this time to the construction of an instrument, which I eventually finished to my satisfaction, and called a Speculum Clamp. This instrument I now produce; and merely mention it to show that for the time I had a strong prejudice in favor of this method of treatment. My experience of the clamp and cautery, which certainly exceeded fifty cases, resulted eventually in the conviction that it was decidedly inferior to the ligature. The immediate risks I found to be greater, and the failures by recurrence more numerous. Certainly it was more frequently followed by secondary hæmorrhage, and I am aquainted with cases where the bleeding, which is reported to have taken place, must have been little less alarming after the use of the clamp and cautery than that which occured in those days when hæmorrhoids were unceremoniously excised, and no precautions whatever taken to arrest hæmorrhage. These cases were operated upon by surgeons of recognized repute in this special method of treating piles. I consider that a plan of treatment which fails to compass that special end for which it was designed, and in addition has other obvious disadvantages, besides the further objection of being somewhat difficult to understand and complex in execution, loses its position in surgery, and must give place to other operations which involve less risk, give better results, and do not require any special surgical training.

Being convinced of the disadvantages and the imperfections of the ligature, and the clamp and cautery, I abandoned both in 1876, and I have never used either of them since.

During the last nine years, with the exception of a few cases treated by thermopuncture, and others by the injection of chemical agents, I have almost exclusively removed hæmorrhoids by excision; and unless I had very ample and sound grounds for advocating the advantages of this plan of treatment, I should have deferred saying anything until such time as much greater experience would have justified the course I am now taking. It has, however, so far exceeded all my expectations, that I have no hesitation in expressing my conviction that it surpasses in every respect every other operation designed for the same purpose. I have now operated upon more than three hundred patients without a death, a single instance of secondary hæmorrhage, or one case where any complication, such as ulceration, abscess, stricture, or incontinence of fæces, have occured. I may go further, and state that I have never had one moment's anxiety about any of the cases, and to the best of my knowledge every patient has been completely and permanently cured.

I am now, with all due diffidence and respect, going to make what may appear a very bold statement. I do not consider that any surgeon has a through conception of hæmorrhoids until he has performed the operation of excision. He may have dissected the cadaver any number of times with the special object of studying the structure of hæmorrhoids, but it is only on the living subject that dissection will reveal their true nature. It is these vivisections that have confirmed my belief in the inefficiency of the ligature and the clamp, and they have revealed also the cause of failure. In surgical literature we read of hæmorrhoids as distinct individual tumors, but the vivisections I have referred to demonstrate that the entire plexus of veins surrounding the immediate interior of the gut is invariably at fault. Without doubt the hæmorrhoidal condition is marked by special protuberance at certain points in the circumference of the gut; and these I find have a pretty uniform position, owing no doubt to the regular disposition of the fibrous septa.

But the essential fact remains that, though possibly concealed by these masses, there are minute venous radicles behind and between the main tumors. They are now as small as their larger neighbors once were, but let the latter be removed by clamp or ligature, and the apparently insignificant venules will dilate and take their place, the very removal, perhaps, affording room for growth, and whilst taking off external pressure leaving the tension within increased. It is on the removal of these rudimentary piles, that the permanence of the cure and the future welfare of the patient depend; and I contend that the operation of excision alone satisfactorily accomplishes this object.

The principles of the operation are exceedingly simple, and its performance requires no special apprenticeship. I have received numerous letters from provincial practitioners, who had only read the original description I gave in the *British Medical Journal* for Feburary, 1882, expressing their entire satisfaction with the operation. As I have since slightly modified the operation, I will first briefly describe it, and afterwards discuss in more detail some of the stages which, perhaps, require further explanation and some vindication at my hands, as the operation is opposed to some of the most cherished practices of modern surgery.

1. The patient, previously prepared for the operation and under the complete influence of an anæsthetic, is placed on a high narrow table in the lithotomy position, and maintained in this position either by a couple of assistants or by Clover's crutch.

2. The sphincters are thoroughly paralyzed by digital stretching, so that they have no "grip" and permit the hæmorrhoids and any prolapse there may be to descend without the slightest impedient.

3. By the use of scissors and dissecting forceps, the mucous membrane is divided at its junction with the skin round the entire circumference of the bowel, every irregularity of the skin being carefully followed.

4. The external and the commencement of the internal sphincter are then exposed by a rapid dissection, and the mucous membrane and attached hæmorrhoids, thus separated from the submucous bed on which they rested, are pulled bodily down, any undivided points of resistance being snipped across, and the hæmorrhoids brought below the margin of the skin.

5. The mucous membrane above the hæmorrhoids is now divided transversely in successive stages, and the free margin of the severed membrane above is attached, as soon as divided, to the free margin of the skin below, by a suitable number of sutures. The complete ring of pile-bearing mucous membrane is thus removed.

Bleeding vessels throughout the operation are twisted on division. This brief description comprises the several stages of the operation.

1. In the first place it will be observed that beyond the chloroformist the operation requires no skilled assistance. A single nurse is quite sufficient, and I have on more than one occasion dispensed with assistance altogether.

Contrary to general recommendation, I prefer the lithotomy position, with the legs well flexed on the thighs, and the thighs on the body. This raises the whole pelvis, and gives the surgeon a commanding view of the field of operations. I sit in front of my patient, with my work on a level with my shoulders.

2. I have a strong objection to the use of instruments in the dilatation of the sphincters. Not only are they apt to produce sloughing, which would jeopardize the success of the final step in the operation, but the danger of rupture and possible future incontinence is also greater, for the resistance can only be very imperfectly estimated, and the pressure cannot be regulated with delicacy, and is moreover unequally applied; I therefore invariably employ digital stretching. With the finger the pressure can and ought to be distributed all round the circumference of the bowel, so that the muscles are uniformly stretched and not torn. If the sphincters be firm I generally introduce my two first fingers or thumbs, and knead the muscles all round, but if the parts are more relaxed, I at once collect the fingers in the form of a cone, and gradually pass in as much of the hand as is necessary. If ordinary prudence is exercised, the sphincters will invariably be restored to the full exercise of their natural function within three weeks.

3. It is better to commence the separation of the mucous membrane from the skin at the lowest point and deal with the two sides in succession,

before completing the circle above, so that any oozing that may occur shall be below the work as it proceeds. The incisions must be made through the mucous membrane and not through the skin. It is very important that no skin shouldbe sacrificed, however redundant it may appear to be, as the little tags of superfluous skin soon contracts, and eventually cause no further inconvenience. If this precaution be taken there is no fear of stricture, which, as Treves has shown, is much less common even after elimination of a complete segment of gangrenous bowel than was once imagined.

The attachment of the mucous membrane and piles to the sphincters is so slight that I either employ the closed scissors as a raspatory or use my fingers in their separation. The firmest adhesions are always found at the highest and lowest points where the fibres of the external sphincters converge. With a very little patience the whole of the hæmorrhoidal plexus can be isolated and the membrane drawn down, leaving the external sphincter almost bare and cleanly dissected. Up to this stage of the operation there is practically no hæmorrage, for, as is well known, the arteries which supply the rectum run immediately beneath the mucous lining, and not in the loose tissue separating it from the sphincters. They are, however, necessarily cut in the next step, which consists in the transverse division of the mucous membrane just above the piles. To prevent hæmorrhage it is advisable to cut through the bowel by degrees and to twist each bleeding vessel as it is divided. After securing the vessels, before making any further incision in the bowel, I attach the free edge of the piece of mucous membrane first divided to the corresponding portion of skin at the verge of the anus. This procedure is repeated until the entire circumference of the bowel is secured to the skin. By this means I almost invariably secure healing by first intention.

The arteries met with are exceedingly small, easily seized, and only require a few twists of the forci-pressure forceps to prevent both immediate and secondary hæmorrhage. Ligatures may slip off, be torn off by the first action of the bowels, or ulcerate through before the vessel is occluded, but torsion never fails.

I have often operated on severe cases and not found it necessary to twist a single vessel, and very frequently only one or two. The rectum and four inches of the bowel can be excised as I have excised it, without securing a single vessel, and I have proved that 300 operations for the radical removal of piles can be effected without a single instance of secondary hæmorrhage; consequently I consider that special instruments and extraordinary precautions may be finally dismissed, and the excision of hæmorrhoids once more be admitted within the pale of general surgery.

I do not make use of any sponges during the operation, as I very much prefer little squares of lint wrung out in hot spirit and water.

Before closing the wound I insufflate iodoform between the raw surfaces, as I find it checks any tendency to sanguineous oozing, and facilitates primary union. For the purpose of suturing the mucous membrane to the skin, I always employ carbolized silk, and I never take out the stitches, as I find they come away of themselves without creating the needless alarm to the patient which their removal generally occasions. Indeed, after the operation, there is no real necessity ever to look at or touch the parts again.

Whilst the patient is still on the table, I introduce into the rectum a suppository containing two grains of extract of belladonna, give the external parts a final dust with iodoform, and place over all a strip of oiled lint, which is retained in position by a T-bandage.

For the first few days, with highly neurotic patients, I keep a bag of ice in close proximity to the rectum, and I generally recommend a dose of castor-oil to be taken on a empty stomach on the morning of the fourth day. The patient sits up on the fourth day, and is in a condition to resume work within a fortnight.

I rarely find that the patient suffers much pain after the operation, though this depends chiefly on the nervous susceptibility of the individual. Some aching in the back may be complained of, as in other pelvic operations, but this is generally relieved by change of posture. If the change of posture does not answer, a hot water-bag or hot salt applied to the back will generally give immediate relief.

Retention of urine occasionally follows, and sometimes I have found it desirable to use a catheter; but, as a rule, I direct the patient to pass water on his hands and knees, and after a little patience he succeeds. I have never but once known the use of the catheter absolutely and urgently required, and that was in a case in charge of another medical man, who confessed that he had prematurely attempted to pass an instrument and failed, and admitted that the retention was more due to his clumsiness than to the real necessities of the patient. I am of opinion that this complication is met with less frequently after excision than after any of the other operations which aim at the same result.

Such, gentlemen, is the operation I wish to advocate for the removal of hæmorrhoids by excision, or I might rather say, for the removal of the hæmorrhoidal area by excision; and I claim:

1. That it is the most natural method, and in perfect harmony with the most approved principles of surgery.

In illustration of the inconsistencies that have from time to time been introduced to support special departures from the ordinary practice of

general surgery on this subject, I will quote the arguments which have recently appeared from the pen of a distinguished surgeon. In the *Brit. Med. Jour.* for 1882, he states, with reference to the ancient plan of excision of the mamma: "The breast was laid hold of with great pincers, and having been cut clean off, the surface was rubbed over with a red-hot poker. Against a proceeding so shocking to the age, modern taste revolted." And yet this distinguished surgeon writes, in 1884: "There have been three great strides in the surgery of the rectum, and one of them is the treatment of hæmorrhoids by the clamp and cautery." Now, I ask, what does the clamp-and-cautery treatment imply if it does not mean that the tumor is laid hold of by pincers, and having been cut off, the surface is rubbed with a red-hot poker. The rectum has its rights, I consider, as well as the breast, and I therefore claim for it the privileges of modern surgery. Curiously, the same author, in 1886, takes exception to the scientific construction of the clamp now almost universally employed.

2. Excision, in addition to its simplicity, requires no instrument which is not found in every practitioner's pocket case.

3. It is a radical cure. It removes the peculiar pile-area, and I believe recurrence to be impossible.

4. Though no operation is absolutely devoid of risk, I consider that excision in this respect is at least on a par with the safest method yet recommended for the removal of piles.

5. The pain after excision is slight in amount, of short duration, and, I believe, less severe than follows any of the other operations.

6. The loss of blood at the time of operation is so small as hardly to merit notice; though perhaps in this respect it must give precedence to the ligature and clamp; but, so far as secondary hæmorrage is concerned, the risks are unquestionably less.

In conclusion, allow me to recapitulate briefly what my contention is. I contend that the internal hæmorrhoids, which are generally regarded as localized distinct tumors, amenable to individual treatment, are, as a matter of fact, component parts of a diseased condition of the entire plexus of veins associated with the superior hæmorrhoidal, each radicle being similarly, if not equally, affected by an initial cause, constitutional or mechanical.

I am of opinion that, when surgical treatment becomes imperative, the extent of the mischief can only be appreciated and effectively dealt with by a free exposure of the diseased vessels, and that no procedure fulfils this purpose short of a deliberate dissection of the lower rectal area.

And, finally, I consider that any operation, which has for its object the removal of hæmorrhoids, is not complete which does not provide for the readjustment of the healthy tissues, with the object of securing primary union and rapid convalescence.

The dread of hæmorrhage in excision of hæmorrhoids, is a delusion which has been fostered and sustained by potential authorities who have, I consider, for the last thirty years, indulged in unjustifiable departure from the sound principles of general surgery.—*Brit. Med. Jour.*

GENERALISATIONS REGARDING THE PATHOLOGY OF ABNORMAL GROWTHS IN MAN AND ANIMALS, AND THEIR EXPLANATION ON THE EVOLUTION THEORY.

No branch of comparative pathology has received more careful study than that which deals with the mode of growth and variations in the histological structure of the various tumours, malignant and benign. In these short notes I propose to restrict myself to a cursory survey of the etiology of abnormal growths, not criticising views which are generally held, and not dealing with the actual or immediate cause, but suggesting a general basis which may be regarded as the ultimate cause to which such abnormal manifestations may probably be traced. In order to clearly explain my meaning and to illustrate it more fully, some remarks of my brothers, Dr. Astley and Professor George Gresswell, may, in the first place, be mentioned.

It may be said that all new formations, as instances of which the enchondromata may be taken, are characterised by the preponderance of cellular elements. These are, of course, variously modified. They may fibrillate, and, further, may be at length calcified; but very rarely, if ever, do they develop into the highest form of tissue, the muscular and the nervous (Buhl). This latter fact is only to be expected, since the tissues of most important specialisation must necessarily be those which are produced, so to speak, with greatest difficulty. It is a familiar fact that all the tissues of organisms are to be regarded as having their origin in cells. Similarly, too, new formations in man and animals are also traceable to the proliferation of cells. Necessarily, the cells become more or less modified so as to become almost, if not quite, indistinguishable from their parent cells. New formations of all varieties are, I hold, to be looked upon as reversionary in nature, and are clearly traceable to a remote ancestral condition, when the primary importance of cells as units not greatly modified, distinct and uncombined into aggregates or but imperfectly and incompletely combined, was far greater in the respect of individual power than it can be, where each cell is dependent on the activities of other units, with which it is combined as in the higher forms of life.

As illustrating my theory, let me briefly consider

some points regarding the enchondromata. Enchondroma myxomatodes presents structural features, such as are met with in the notochord of the vertebrate animals. The cells of some enchondromata are stellate, their processes uniting into a network. A like condition of cellular structure is met with in the selachii, which may be regarded as the root forms of the vertebrates. Again, enchondromata are most common in the limbs, and especially in their distal extremities; and, since the original condition of the vertebrate limb is represented in the selachii as a multitude of cartilaginous rods arranged in a definite manner (the rods increasing in number towards the distal extremity of the pro-pterygium, the meso-pterygium, and the meta-pterygium), we are perhaps justified in looking upon these facts as showing to us homologous relationship. Corroboration is seen in the frequency with which cartilaginous bodies develop in connexion with certain joints of the limbs in man and animals. These bodies are either single or multiple, and they are of all sizes up to that of a small apple. Cruveilhier figures a number of rounded cartilaginous bodies in the elbow joint. Mr. Smith removed over 200 loose rounded cartilages from the knee joint of a man at St. Bartholomew's Hospital. He also operated on a woman, aged twenty-eight, who had for six years presented a tumour in the upper third of the right arm, immediately beneath the skin. The tumour was pyriform, tapering towards the axilla. It was three inches and a half long, and two inches in diameter at its thickest part. It was encapsuled, and within the capsule there were found one large mass of cartilage and twelve or more detached lobulated bits of cartilage. There were also similar detached nodules of cartilages in the axilla. The limbs, in fact, of the higher animals may have therefore dormant germs of the ancestral rods of cartilage; indeed, cartilage cells have been found in the synovial tufts of some joints. From such centres some of the above-mentioned cartilages had apparently developed. Supernumerary fingers have been referred to the multifid condition of the rays of the selachian fin. New formations of capillary vessels are generally congenital, and they are much commoner in the skin of the head and neck than elsewhere. These facts might suggest the possibility that they bear homologous relations to the vessels which develop about the epiblastic involutions lining the visceral arches of the lower vertebrata. Dr. D. A. Gresswell recently saw a nævus, the distribution of which seemed to afford some corroboration for such a speculation concerning the homology of nævi. It extended in a snake-like form down the right side of the neck; it was distinctly raised, and it passed with a tapering extremity into the external auditory meatus, down which it extended for a considerable distance.

It will be seen that the view which Dr. D. Astley Greeswell pointed out, but which we now wish to lay stress upon, is that one of the primary properties of cellular organisms was that of multiplying by processes of fission and gemmation. This characteristic, originally possessed by independent units, is still, in greater or less degree, a feature of those units which, when combined in various ways, make up the tissues and organs of higher forms of life. At times, and under special circumstances, which, in the present state of our knowledge, in many instances can only be roughly traced, this ancestral tendency of the cells to divide and multiply on their own account shows itself once more with something of its old vigour, and then new formations of various kinds result. When the bloodvessels are invaded by pathogenic micro-organisms, may it not be that, as previously pointed out, a kind of warfare, so to speak, goes on between the blood cells and the vegetal germs, and that when the latter gain the victory the man or the animal dies: whereas in cases where the blood-cells possess the power of strong resistance, the sufferer also withstands the deadly effect of the foe? In some instances, then, the fertility of cells in the way of reproduction would be highly servicable to the man or animal, while in others such power of multiplication is manifestly most destructive. Is it not a great question if we should not, in our investigations of disease, search most diligently into all these conditions which would enable us both to control and to facilitate the growth and multiplication of cells?—*A. Gresswell in Lancet.*

THE CLIMATE OF COLORADO SPRINGS FOR THE PHTHISICAL.

A gentleman who had tried the favorite resorts of Europe and America, describes the advantages of Colorado Springs as follows in the *New York Tribune* of May 22, 1887:

No climate is absolutely perfect, so I shall first call attention to the only blemish in the climate of Colorado Springs. We have some wind and, at times severe wind, yet the number of days when an invalid is compelled to remain indoors on account of strong wind is not more than the number he is compelled to spend indoors at Davos, in Switzerland, on account of the falling of snow. Furthermore, if an invalid finds the wind objectionable he can readily escape it by changing to Manitou Springs (ten minutes by rail), which is even more sheltered than Davos.

Now as to the advantages of Colorado Springs:

1. Its altitude is six thousand feet above sea level. To the north the land rises gradually, thickly wooded, to the height of 7,500 feet. Six miles to the west runs a spur of the Rocky Mountains culminating in Pike's Peak, 14,200 feet high.

Thus the city is sheltered to the north and west, and is open to the south and east. 2. The sunshine is almost uninterrupted. During the winter there is no rain, no cloudy or foggy weather, and hardly any snow. Snow falls very rarely, and when it falls it disappears quickly and almost miraculously, leaving neither mud nor dampness behind. 3. As the city lies open to the east and the higher mountains to the west are at some distance, the daily duration of winter sunshine is very great—fully forty per cent. greater than at Davos. 4. The character of the soil is porous. This is a very important advantage. If rain or snow falls at Denver, for example, the result is mud, and mud means continued dampness. There is no mud at Colorado Springs. 5. The invalid is not restricted to hotel life. Boarding-houses and furnished houses abound. Housekeeping, owing to the presence of a large number of very superior stores, is made easy. Should the invalid prefer hotel life, he will find the hotels first-class, but be it said that no American hotels are so carefully managed as to comfort nor so particular as to ventilation as are the hotels of the Riviera or of Davos. 6. There is nothing of the hospital character about Colorado Springs. Of its 7,000 inhabitants, many never were sick, and many who once were are now perfectly cured. The invalids are scattered to such an extent, there are so many amusements and points of interest to disperse them, that one never feels the depressing influence of being in a great consumptive hospital. 7. Amusements are very plentiful. There are few cities in the world that offer such a variety of beautiful rides and drives. Invalids are out riding or driving nearly every day in the year. Many people of wealth and culture reside here, society is pleasant and clubs of all kinds abound—social clubs, reading clubs, musical clubs, fox-hunting clubs, etc. An invalid here has neither time nor disposition to mope. 8. One of the objections I found to Davos and the Riviera was that when spring came the patient was chafing to get away. I do not find this at Colorado Springs. Nor is it necessary. The summer climate is just as healthful and just as exceptional as the winter climate. In fact, the reputation of Colorado summers brings thousands of tourists here every summer. The days are warm, not uncomfortably so, and the nights are always cool enough to make a heavy blanket necessary. Some invalids go up into the beautiful near-by mountain parks (8,500 to 10,000 feet high), and live at a farm house or camp out. Some change to Manitou Springs and enjoy witnessing the summer gayety. The majority remains here and are equally benefited. 9. If a patient feels disposed to make a change during the winter, he has a large choice of places which he can visit with safety. He may go to Denver or to any of the towns between Colorado Springs and Pancha Springs inclusive. This belt of territory is all favored with an exceptional climate. On the other hand, if an invalid finds that the climate does not agree with him, he can travel hence to Southern California quickly and comfortably.—*Med. News.*

OPERATIVE TREATMENT OF EMPYEMA OF THE ANTRUM OF HIGHMORE

In the *Archiv. für. Klin. Chirurgie*, is a full report of a paper on a new method of dealing with empyema of the antrum, read by Professor Mikulicz, of Cracow, at the last meeting of the German Surgical Society. The indications to be fulfilled in the treatment of this condition are, it is stated, clear and simple. In every case it should be the surgeon's endeavor to make an artificial opening in the cavity, and to maintain this opening until suppuration has been completely arrested. The methods which establish an opening into the antrum by the mouth have two advantages. The cavity is thus perforated at a convenient and accessible spot. The surgeon can readily apply his instruments, and the after-treatment can be conducted under the control of both his eyes and fingers. Moreover the perforation is well situated for the flow of pus, and corresponds to the most dependent part of the antrum. There are, however, certain disadvantages attending the operation by the mouth. Suppuration in the antrum often persists for a long time, it may be for months or even years, and it is necessary to maintain the opening until the discharge has closed. This is not an easy matter, as there is always a tendency for the opening to contract and close, unless a stiff drainage-tube be worn. Free communication between the antrum and the mouth is attended with inconvenience, and portions of food and other foreign material may pass through the opening into the cavity, decompose there, and set up fresh suppuration. In consequence of these objections to the oral operation, attempts have been made to open up the antrum in another direction. An objection might be made, it is pointed out, to the old operation on physiological grounds. The antrum has not any normal connection with the mouth, but it is to be regarded as a pneumatic appendage of the nasal cavity with which, in a healthy condition, it has free communication. If this communication be shut off in consequence of any pathological process, that operation would seem to be the most rational that serves to re-establish the normal condition. The author is opposed to any method of attempting to reach the antrum through the middle meatus. It would, he states, be found very difficult in such attempt to open up the antrum and afterwards to inject the cavity. Besides, the perforating instrument would be brought into

dangerous proximity to the orbit, which cavity is separated from the nose by only a thin plate of bone. Again, an opening in the middle meatus would be most unfavorably situated for the discharge of a large accumulation of pus. The author advocates an opening made from the inferior meatus. The osseous septum between the portion of the nasal cavity and the antrum is very thick and dense near the hard palate, but soon becomes reduced to the thickness of paper, and may be readily perforated by a stout cutting instrument. For this purpose a short double-edged knife, or rather cutting stylet, set on a curved shank, has been devised. This is introduced along the inferior meatus, until it reaches the inferior turbinated bone, when its point is turned outwards and thrust through the septum into the antrum. The opening having been enlarged by to and fro movements of the instrument, the elongated and curved nozzle of a specially devised elastic bell-syringe is introduced, and the cavity of the antrum is washed out. This operation, which proved successful in two cases reported in this paper, is not likely, it is asserted, to be attended with any difficulty except in cases of abnormal narrowness of the inferior nasal meatus, of extreme hypertrophy of the inferior turbinated bone, or much thickening of the osseous septum between the antrum and the inferior part of the nasal cavity.—*Lond. Med. Rec.*

CHIAN TURPENTINE IN THE TREATMENT OF CANCER.

Dr. John Clay, of Birmingham, England, writes as follows concerning the administration of Chian turpentine in cancer :

"Success in the treatment of cancer by this drug depends upon : 1, the mode of its administration ; 2, the stage of the disease ; 3, the complications by which the growth is attended ; 4, the persistence of the treatment. The idiosyncracy of the patient will also influence more or less the rapidity of action of the drug ; in one case the good results will be apparent in two or three weeks, while in another it will be as many months before the external appearances will give evidence of any beneficial action. If there is no perceptible increase in the growth in the course of two or three months, it may be relied upon that the drug is exerting a beneficial action, and other things being equal, the ultimate success of the treatment will depend upon the perseverance in its continuance. Everything depends upon the purity of the drug, for there is an immense amount of adulterated and fabricated stuff in the market. There is *prima facie* evidence of the genuineness of the gum if no violet odor is communicated to the urine, and if no skin rash or cutaneous eruption is manifested after the lapse of a few weeks. The external application of a chromic acid solution (twenty or thirty grains to the ounce of water) to a cancer in a state of ulceration is sometimes useful. The following is the formula for preparing the mixture, as published by the dispenser to the Queen's Hospital, Birmingham : 'An etheral tincture is first made by mixing equal parts of Chian turpentine and ether, and shaking frequently in a well-corked bottle until all soluble matter is dissolved. An emulsion is then prepared in the following manner : Place in a large mortar two hundred and forty grains of powdered acacia, and fifty grains of powdered tragacanth, and one ounce of the tincture of Chian turpentine, mix, and add, all at once, a fluid ounce of water, triturate until an emulsion is formed and then dilute gradually up to eight fluid ounces. Two fluiddrachms will contain seven and a half grains of the pure drug—the initial dose. All trace of ether must be removed by exposure in an open vessel, preferably in the cold.'

"Those cases are most suitable for treatment in which the disease affects the skin or mucous surfaces, and the earlier the treatment is begun the better is the chance of success. When the lymphatics are extensively involved, or when the disease has invaded the peritoneum, pleura or vagina, the drug can be recommended merely as a palliative. In cancer of the uterus or rectum, if treatment has not been begun very early, disease of the kidney (not necessarily of a malignant character) is apt to arise. If this condition becomes manifest, the action of the drug will require careful watching, and it may be necessary to abandon it altogether. It is advisable, after the medicine has been taken for two months, to omit it for two days in each month, beginning again with it in the same dose that was given at the time of its discontinuance. Opium, in large doses, is antagonistic to Chian turpentine and should only be given when absolutely necessary because of severe pain, and then only in small doses—about seven minims of the tincture incorporated in the mixture.

"The combination of resorcin with Chian turpentine (two drachms to eight ounces of the above mixture) is sometimes beneficial. The mixture is given in doses of one teaspoonful in cold milk three times a day after meals, increased in two weeks to two, and in two weeks more to three teaspoonfuls. Its administration is to be persevered in for a long time. Too speedy results are often expected from the remedy, and hence it may be abandoned too early before it has received a fair trial. If the disease seems to be arrested at the expiration of a few weeks, it is quite sufficient to justify a continuance of the drug.

"After the arrest of the disease the remedy must be continued until some obvious change takes place, and it must be administered continuously in increasing doses, under any circumstances, even if some apparently discouraging conditions arise."

Dr. Clay adds some remarks concerning the administration of the remedy in individual cases, which, however, we are obliged to omit on account of the pressure on our columns.—*Medical Record.*

MEDICAL NOTES.

The *subiodide of bismuth* is now being much used as a local application at the hospitals, instead of iodoform.

There are only two remedies which have the power of causing involution of *uterine fibroids*—electricity and ergot.

The best preparation of *aconitine* is Duquesnel's. It is three times more powerful than any other preparation in the market.

Of internal remedies for *hemorrhage of uterine cancer*, Prof. Parvin states that probably one of the best is the infusion of cotton root.

In *constipation* caused by a deficiency of excretion, secretion and muscular power, a capital addition to a purgative pill is physostigma.

For flushings and other morbid sensations occurring about the *climacteric period*, Prof. Bartholow prescribed a three grain pill of iodoform, ter die.

The best remedy for relief of, but which cannot cure, *paralysis agitans*, is hyoscyamine, gr. $\frac{1}{100}$ twice a day. Do not produce the active effects of the drug.

A case of *infantile eczema* was recently shown at the Jefferson College Hospital clinic, which had been treated locally with a solution of resorcin, with very beneficial results.

For *spermatorrhœa*, characterized by a lack of vigor in the erections, due to a want of tonicity of the vessels, give digitalis; may be advantageously combined with the bromides.

For *dysmenorrhœa*, Prof. Bartholow advises the inhalation of amyl nitrite for the attacks, and during the intervals the internal administration of the one per cent. solution of nitro-glycerine.

Prof. Da Costa strongly recommends gallic acid in *hæmoptysis*, but advises it to be given in doses of gr. xv-xx every fifteen minutes "until the blood turns black." It is of no use whatever in small doses.

For *mitral stenosis*, Prof. Bartholow advised that caffeine in gr. iiij doses be given three or four times daily; to improve the general nutrition, gtt. j-v of dilute nitro-glycerine, to determine the dose by the effect.

For *diarrhœa* coming as a desire to stool after eating, with thin and watery discharges, Prof. Bartholow ordered the following: Two drops of Fowler's solution and six drops of the deodorized tincture of opium three or four times daily. Put on exclusive milk diet for a short time.

Prof. Bartholow thinks for beginning *pneumonia* up to stage of exudation, nothing is better than a combination of tinct. aconiti and tinct. opii. gtt. v of the former, and gtt. viij of the latter, as an initial dose, followed by, respectively, gtt. ij-iij of each every hour, or according to the effect produced.

For *diarrhœa* of three months' duration, characterized by a desire to evacuate the bowels immediately after eating, Prof. Bartholow advises the following plan of treatment: Put patient on a milk diet as far as possible, also—

℞ Creasoti . . . . . ♏ij
Bismuthi subcarb. . . . gr. x-xv
Glycerini . . . . . f℥ss. M.
Sig.—Ter die, before meals.

Col. and Clin. Record.

THE TREATMENT OF ECZEMA.

The diagnosis of eczema is comparatively easy. If we except acne, it is the commonest of all the cutaneous diseases. It includes about one-third of all cases of skin diseases that come under treatment. It seems to be more frequent in this country than abroad, Hebra making it about 16 per cent. of all the cases treated at Vienna. Eczema is remarkably protean in its manifestations, showing itself under the most varied forms; at one time it appears as an erythema, and at another time takes the vesicular form. Also remember it is the only weeping skin disease—not in the sense that an excoriated surface weeps, but as part of the pathological process of this disease, by an excessive exudation of liquor sanguinis, which cannot be consumed in supplying loss, which remains over and infiltrates the cutaneous structure. The squamous or dry form is mistaken for psoriasis, a squamous syphilide, etc. Seborrhœa also is often mistaken for eczema. It is true the two diseases often present the same or similar appearances as they occur on the scalp. They do often exist together, or one is the sequel of the other. Eczema of the scalp is, as a rule, seated on a circumscribed spot, while in seborrhœa the scales cover the whole scalp. In cases of doubt, care should be taken to obtain the history, etc., and then a correct diagnosis can easily be made.

In considering the treatment, only an outline can be given. To enter upon the subject more fully would be to furnish subjects for an indefinite number of meetings. Eczema is a perfectly curable disease, provided the cause is sought for and remedied. In the acute form care should be taken not to over-treat. The great tendency is to ad-

minister arsenic, and apply a stimulating ointment, and then trust to nature for the cure. If nature had been let alone, or, better, aided by using some bland protective ointment, and a brisk cathartic internally, she would have brought about the cure much sooner than she would when stimulated almost to the point of irritation. We often find eczema accompanying digestive troubles. In these cases the diet should be plain and nutritious, and some tonic be used. I prefer tincturæ nucis vomicæ, combined with some of the simple tonics, such as gentian or cinchona. Although in direct opposition to the teachings of the books, I have seen arsenic do a great deal of good in the eczema of dyspepsia. I think the best plan is to give small doses and very gradually increase—say, two minims of the liquor potassii arsenitis, increased to five, and then return to the original dose. Arsenic is a drug which has caused a great amount of discussion. While it is the dermatologist's sheet-anchor, it may be misused. It was pretty clearly brought out by the recent discussion, by both dermatologists and general practitioners, that arsenic was, in the majority of cases, a very successful and safe drug to employ, provided the physician took care to watch the effect, etc. The habit of prescribing arsenic in all cutaneous diseases can not be too strongly denounced, and I think the majority of text-books and lecturers are to blame for not teaching the student and doctor how to make distinctions between those cutaneous diseases which are benefited by arsenic and those which are not. In children which appear healthy, but are fat and flabby in texture, fed, as a rule, on food containing quantities of starch, and who are allowed to "drink all the tea and coffee they want," and other unwholesome food, I have seen eczema which had resisted all other treatment heal up almost by magic under a corrected diet, a brisk mercurial cathartic, and a bland protective ointment applied to the affected parts. The cure is explained by looking at the etiology of eczema in this class of patients—namely, a congested skin produced by a circulation, or a torpid state of the bowels, which we relieve by curing the constipation and restoring tone to the circulation. After this introductory treatment, I give directions regarding food, and often give tonics—such as cod-liver oil and some form of iron, preferably the syrup ferri iodidi. In young children, and persons having tender skin, care should be taken not to use an ointment too stimulating. I have a case in mind now where an ointment of the red oxide of mercury was used for a simple eczema, which caused a severe pustular eruption. When the ointment was changed for a simple protecting application, the eczema soon improved, and the child became well. I have seen several cases of eczema resulting from that much-advertised "skin success," which I believe is composed of the red oxide of mercury, some preparation of tar, and vaseline. For the removal of crusts in cases of eczema of the scalp, some oil should be used, either olive, or raw linseed-oil being the best. In scrofulous subjects you may use cod-liver oil with the hope of good results from the absorption. If there are pediculi along with the eczema, crude petroleum is useful for destroying the parasites.

A good application for local eczema in children is to apply the ointment in the form of a plaster. Unna, of Hamburg, uses an application called "Salbenmull," consisting of sheets of thin cotton material incorporated with various kinds of ointments; he also uses one somewhat similar, various medicaments being spread on gutta-percha tissue instead of cotton sheeting; the advantage of this over the former is, that the gutta-percha plaster will adhere to the part without the use of a bandage. The most obstinate cases to treat are those of old, dry, rheumatoid eczemas, found, as a rule, on the limbs of old people. My plan in these cases is to give plenty of salines, unless the heart is weak; if such is the case, caution should be observed, for by giving too much alkali we may produce a state of superalkalinism which may assist to a fatal result. A very good plan to observe in giving salines to old people is to combine them with digitalis. I also give tonics, such as iron, quinine, etc., and if there are symptoms of rheumatism, it is well to give, in addition, iodide of potassium and colchicum. Externally, I first remove the crusts or scales, which may be done with green soap, the liquor picis alkalinus of Bulkley, or hot poultices; my preference is for the poultice. The heat and moisture seem agreeable to the hot, tense skin, and the patient will express himself well pleased with the treatment. After all the crusts are removed, and we have a clean shining surface, apply an ointment, stimulating or not, as the case would suggest. An ointment which I have found well adapted, when stimulation was required, is composed of the following:

℞ Hydrarg. chlorid. mit. . . gr. xxv.
Olei cadini . . . . . ♏ xx.
Unguent. zinci ox. . . . ʒ j.
M. Ft. unguent.

Oleate of mercury may be substituted for the calomel, about a drachm of the five-per-cent. to the ounce. One of the most distressing symptoms is the intense itching, which may be relieved by the addition of iodoform to this ointment, or, if the disagreeable odor of iodoform is objected to, iodol, a new preparation from iodine, may be substituted with equally good results. I have seen the compound tincture of benzoin, prepared and applied as recommended by Professor Sherwell, of the Long Island College Hospital, allay the itching when all other applications had failed. Dr. Sherwell's directions are to evaporate the tincture to

three-fourths its bulk, and paint this over the eczematous spot. I am not in favor of the heroic plan of treatment, such as blistering with cantharides, carbolic acid, or iodine. I think just as good results can be obtained by employing milder stimulants, and if the desired effect is slower, you will be amply repaid by not causing your patient unnecessary pain and discomfort. When eczema is complicated with varicose veins, a rubber bandage applied closely to the part has a decided curative effect, due, no doubt, to the support given to the enlarged veins, restoring, or rather correcting, the circulation in that particular part. There are two or three questions regarding which the physician must first of all satisfy himself. One is: What is the internal cause, if any? Another question: Is the disease acute or chronic? and third: What stage is it in? When these questions have been answered, the proper method of procedure will at once become apparent. The German plan of treating the external manifestations of the disease alone has many things in its favor and some against it. It is very well in cases of doubt to direct attention to the visible lesion, and await developments for light on the internal trouble. The other extreme, which the French school teaches, of attributing the disease to the so-called diathetic cause, is open to as many objections. But the unfavorable features in either system have been very successfully remedied in the English, or more particularly the American, method of taking the safe middle ground of combination, and uniting both the internal and external plans, and so bringing about results which I think will be found to be far more brilliant than if only the method of either of the European schools is strictly adhered to. I trust that, with the ever-increasing facilities in the American medical schools for the successful study of skin diseases, the day is not far distant when the general practitioner will be able to diagnosticate and treat these troubles just as skilfully as the specialist; and eczema in its protean forms will become one of the least, as it is now the greatest, of all the cutaneous diseases.—Dr. Winfield, in *N. Y. Med. Jour.*

MANAGEMENT OF THE SICK ROOM.

It is so generally the custom of medical men to leave the management of the sick room to the friends of a patient or to nurses, that it seems to be almost forgotten that this is, in a remarkable degree, a professional duty. "Treatment" does not consist wholly, or, indeed, chiefly, in the administration of drugs. The surroundings of the sick are not less important as agents of cure than the medicines given to them. Indeed, we will go so far as to say that in the best and most physiological methods of therapy, drugs are only admissible as *aids* to the arrest of disease and the recovery of health, which Nature will accomplish if only the case be so conditional as to remove obstacles out of her way, and facilitate the processes whereby she is working. The scientific therapeutist regards the placing of his patient in circumstances favorable to convalescence as the first and most urgent step to take, and it is therefore impossible for him to look upon the management of the sick room as of trival or even subordinate importance. We have no thought of attempting to determine the particular conditions required for the recovery of the sick. Obviously these can only be indicated by the needs of each patient. We believe one and all *systems* of management must be open to the fatal objection, that they do not deal directly with the lesser needs of the individual; and these lesser needs are in practice the most important. The point on which we are especially anxious to insist is, that the practitioner ought to make the management of the sick room his most solicitous care. To relegate this part of his duty as a minister of health to a nurse, however skilled, or friends, however intelligent and solicitous for the welfare of the patient, is to surrender to others a power which may be either wasted or applied obstructively, with the best of intentions; and simply because, being dissociated from the exhibition of drugs, the management of the sick is no longer felt to be what it really is—namely, an integral and elementary part of treatment

To manage the sick room wisely and efficiently, the practitioner must be so thoroughly versed in all the details of nursing as to be able himself to do, if necessity arises, all that he expects of others. The best illustration of what we precisely mean, may be found from the position of a captain commanding a ship in a storm. He not only possesses a general notion of what ought to be done, but he is practically acquainted with every rope, spar and sail in the vessel, and he could, if it were physically possible, perform the whole duty himself. He can supervise, because he has himself passed through every grade of seamanship, possesses the knowledge of *how* things are to be done, as well as what to do in the circumstances. Now, we greatly fear that anything approaching this practical familiarity with the details of the duty devolving upon a medical practitioner as a minister of health, is rare, and daily becoming increasingly difficult to find among the most advanced and theoretically competent workers in our profession. Division of labor is no doubt a necessity of progress, but we cannot regard without uneasiness the erection of nursing into a specialty, separate from, and in a large measure independent of, treatment. The profession is not, we think, aware of the magnitude of the sacrifice it is making, in allowing this province of the art of healing to pass

out of its grasp. The development of nursing as a craft, has grown out of the neglect with which that function has been too long treated by those who ought to be its principal promoters and directors. The condition of matters exposed by Charles Dickens in connection with his personification of the old-fashioned nurse as "Sairey Gamp," did permanent service; and the nurses of to-day are confessedly as superior to their predecessors of forty years ago, as the medical men of the present time are better provided with instruments of precision, and more skilled in the knowledge of both health and disease than those of the last or a previous generation. Nevertheless, we cannot but feel that against this grain to the interests of good management in the sick room must be reckoned the very grave fact that the most erudite and expert of our cloth to-day are incomparably, and almost of necessity, less able to direct and control the conditions of the sick than the practitioners of a time when the average attainments of the scientific physician or surgeon was immeasurably less considerable than those of the least advanced and accomplished of our contemporary doctors. There is no marvel in this fact, because nowadays the details, and much more than the details, of the art of nursing are left to a class of persons who, whatever their devotion or intelligence may be, are certainly not qualified to take the position of medical practitioners.

It is not with any degree of disrespect to the class of skilled nurses that we protest against the growing evil of surrendering a large and most potent part of the art of healing to those who are not in a position to master it. No lasting success can possibly attend the separation of nursing from medicine. The doctor who does not himself direct the nursing of his patient in all its details cannot be held to have control of even half the appliances of cure, and, for anything he can tell, the manner in which his patient is treated during the intervals between his visits may be such as though admirable in themselves, must prove antagonistic to his own method and policy. We are not now thinking of the disastrous effects of bad or even careless nursing, but of the very best that can be procured. Nursing ought to play a leading *role* in treatment, and therefore it should be one of the first considerations of the practitioner. His should be the guiding hand in everything that concerns the sick, and to this end his authority and influence should be paramount. A great point is gained when it can be said of a practitioner that when he appears on the scene he takes not only general but specific control of the whole management of the case, and personally directs every detail. In no other way can perfect unity of aim and policy be secured. It may be argued that the busy practitioner has no time to spare for thus entering into matters; or that he descends from a high professional position when, for example, instead of contenting himself with simply ordering a poultice, he takes pains to ensure that it shall be properly made. How strangely erroneous such notions as these really are will appear when we reflect that the most successful practitioners have been, and still are, those who possess, and do not scruple to supply, the most minute acquaintance with the art of nursing—a knowledge for the most part either acquired by painful experience in their own families or obtained by years of observation and practice in the wards of hospitals where homely rather than ornate systems of nursing were in operation. It must be frankly confessed that we do not see how the students of to-day are to learn the art of nursing in such a way as to render them really able and useful practitioners in private families, seeing that the management of the sick chamber is an art and mystery studied and practised by a separate class of non-medical persons, who cannot share the practitioner's responsibility. —*Lancet.*

THERAPEUTIC EFFECTS OF SEA AIR.

The practice of a more or lesss prolonged stay at the seaside in the summer is one of very ancient date, if we regard only the wealthy and leisured classes, but its general adoption is a more modern habit. The Roman noble sought refuge from the summer heat of Rome at Baiæ and Paestum, but he was not followey thither by the trader or farmer, and still less by the artisan and mechanic. In modern times, however, almost all classes, except the very poorest, participate, more or less, in the custom of seeking to exchange for a time the heavy and vitiated atmosphere of large cities for the refreshing breath of ocean. It is worth while to inquire the *rationale* of this custom, the benefits to be expected from it, and the classes of individuals to whom it is especially applicable. We have, first of all, to take into account the simple element of change. Monotony of occupation and diet is, in the long run, injurious to the organism; and change of air operates beneficially by inducing change of habit and of food, and by turning the current of life into fresh channels. It is not desirable that such a change should be from one extreme to another, such as from a very damp and relaxing atmosphere to a dry and stimulating one, or from a confined and sedentary life to one of boisterous activity. By such extreme changes the system is apt to be overtaxed, and, instead of renewal of health, too often the result is disturbance of sleep and digestion, and the induction of nervous exhaustion.

But the resort to the seaside means much more than mere change of air. It involves the exchange

of a more or less vitiated atmosphere for one of almost perfect purity, and the substitution of tonic and bracing conditions for those that are usually relaxing and depressent. Sea air is free from all sources of organic contamination ; it possesses much ozone, and traces of bromine and iodine. Hence, it is highly tonic and alterative, if we may still use a somewhat objectionable term, for which we are yet without any satisfactory substitute. The air at the seaside is also in almost constant motion ; and this factor has its influence in increasing the tonic and bracing effect. In favorable cases, sea air produces a marked augmentation of appetite, increased desire for sleep, and a proportionate improvement of nutrition. These three factors are usually closely associated, and the effect of sea air may be accurately gauged by its influence upon appetite and sleep. The increased drowsiness at the seaside is often, for a time, accompanied by a feeling of agreeable languor, which usually gives place to one of renewed energy. The purity of the air, the presence of ozone, and the stimulation of appetite, afford the requisite conditions for improved sanguification ; while the fresh air life and habits of healthful activity tend to the improvement of muscular and nervous tone.

Thus, in a very large proportion of cases sea air is beneficial. It suits especially those who are organically sound, and merely exhausted by excessive work or prolonged confinement in impure air. It affords the desired fillip to the energies of those who require a little recuperation for the performance of fresh labors. In most cases it is admirably adapted to the needs of children, who delight in the fresh atmosphere, the easy, careless life, and the facilities for out-of-door amusement. We may lay down, in general terms, that sea air suits the majority of people who are in average health, and tends to promote the increased well-being of those who are already well. Its application to cases of disease is more difficult and disputable. That sea air is, in many cases, an admirable restorative and a powerful means of changing morbid action, and hastening convalescence, is undoubted ; but as little can it be denied that it is often improperly recommended and fruitful in mischief. The chief therapeutic effect of sea air is its stimulating property ; and in considering its application to disease, the first point to be determined is whether the patient is in a condition to bear stimulation. Many diseases require soothing rather than stimulating ; and, in such cases, sea air is contraindicated. Thus, in all cases of nervous excitement, hysteria, and allied conditions, the desideratum is to quiet nervous action rather than stimulate an activity which is already abnormal. Here sea air is likely to do nothing but harm, and should be avoided.

Again, in convalescence from acute disease, it is always a nice point to determine when the patient has rallied sufficiently to be able to react to the stimulation of sea air. In retarded recovery from typhoid fever, pneumonia, and other acute specific maladies, few things are more worthy of the nicest consideration of the practitioner. On his accurate diagnosis of this point will turn his decision, whether his patient should continue the rest and quiet of his home, or try to hasten recovery by recourse to the seaside. Two points seem of special importance in the determination of this question—viz., temperature and the condition of the nervous system. If the temperature be normal, and the nervous system fairly quiet, sea air may reasonably be expected to operate beneficially. If pyrexia and nervous irritation be still present, it is very apt to promote a recrudescence of disease.

There are some constitutional conditions which bear stimulation well, and these may be expected to benefit decidedly by resort to the seaside. Of such cases, struma affords the best instance in point. Rickety children may also be confidently ordered to the seaside, as statistics show that rickets is relatively rare at marine localities. In hereditary predisposition to phthisis, sea air seems almost uniformly beneficial. Many people suffer from disordered hepatic action at the seaside, and some cutaneous affections, especially eczema, are aggravated by sea air. These facts point their own moral. In all cases where sea air seems too stimulating, its exciting action may be reduced by choosing a residence that does not face the sea, by taking inland walks, and by abstinence from bathing.—*Brit. Med. Jour.*

Ziemssen on Cold Water Treatment of Typhoid.—The *Journal of the American Medical Association* for May 14th contains a full abstract of a lecture on Antipyresis and Antipyretic Methods by Professor Ziemssen, director of the Medical Clinic of Munich, especially in regard to typhoid. The lecture is very interesting and earnest. It claims a high value for the treatment by baths, and expresses a hope that after the favorable results of active antipyresis, physicians will not lapse again into the therapeutic indifference of the Vienna School. Of all antipyretic measures Ziemssen considers hydrotherapy the chief : first, because it combines in itself all the attributes of a remedial measure ; and, secondly, because its action on the fevered organism may be varied to any degree. The benefit of such treatment is not confined to typhoid, but is also to be noticed in other febrile diseases, such as pneumonia, erysipelas, and acute phthisis. The cold and lukewarm baths act, he thinks, by cooling the blood at the periphery, the vital fluid being returned to the internal organs with an indescribably pleasant as well as beneficial effect. Sleep is favored. There is an improvement in digesting, so that the patient can be fed better. On the circulation the effect is to con-

tract the peripheral vessels, the heart works more slowly, the vessels show an improved tension, dicrotism is decreased, and the elasticity elevation returns. The respiratory apparatus is excited by the peripheral irritation to deeper and slower movements, cough is more effective, and in this way bronchial obstructions and consequent atalectasis and catarrhal pneumonia are better avoided than by the impracticable advice to turn a fever patient on his side. Ziemssen gives two or three statistics to show the effects of the cold and the lukewarm bath treatment respectively. He takes his illustration of the strictly cold bath from Vogl, physician to the Garrison Hospital at Munich. He gives (with a rectal temperature of 102·2° F.) a cold bath at 63·5°, lasting a quarter of an hour, about every three hours, winter and summer, in unheated rooms, with windows open day and night. This is bold treatment, and for soldiers (for the most part with young and picked lives) does well. There were only 52 deaths in 610 cases, or 5·4 per cent. Murchison gives the mortality of typhoid in the London Fever Hospital, after deducting cases which died within forty-eight hours of admission, at 15·82 per cent. Ziemssen compares Vogl's practice with strict cold water treatment with Naunyn's in a civil hospital, who, with an axillary temperature of 103·1°, taken every three hours, gives usually eight baths in twenty-four hours, generally between noon and midnight, at a *not lower* temperature than 72·5°. He divides baths into *cold* (72·5° to 81·5° F.; duration, five to ten minutes), *lukewarm* (from 81·5° to 90·5°, ten to fifteen minutes) and *warm* (90·5° to 95°). The warm are given in the later stages in very active delirious patients with great restlessness and muscular weakness. By this treatment Naunyn lost 10 of 145 cases, or 6·9 per cent., "certainly a favourable percentage." Ziemssen himself says that for twenty years he has recommended, for private practice, the gradually-cooled bath. The patient is placed in a warm bath of 90·5° or 86°. The water is continually poured over him with hands or sponge. While this is being done, cold water is very slowly poured in at the foot of the bath tub, and the water reaches gradually a temperature of 77° or 72·5°, until the patient's teeth chatter, or he declares he can stand it no longer. He is then taken out and placed in a blanket previously warmed, and wrapped in it without being dried. In this he remains in the greatest comfort for fifteen minutes, is then rubbed dry, and allowed to sleep. Ziemssen, like a wise physician, recommends the study of the peculiarities of individual cases. While lauding the bath treatment, he speaks respectfully of antipyretic drugs.—*Lancet.*

PERIPHERAL NEURITIS.—In discussing this subject in the *Brit. Med. Journal*, 1887, p. 6, Ross says that the symmetrical manner in which the disease usually attacks the body shows that at least in the majority of cases it is produced by some poison in the blood. Thus salts of lead, arsenic, and probably of copper and other metals are capable of giving rise to it. In a second group of cases the disease is caused by alcoholic excess, the fumes of bisulphide and oxide of carbon, and probably by the abuse of chloral and chloroform. It has also been observed in advanced diabetes. A third variety arises from animal poison. Diphtheritic paralysis is the best known instance of this. It is also to be observed in syphilis, smallpox, scarlet fever, measles, typhoid, typhus, intermittent fever, dengue, tuberculosis, leprosy and beri-beri. It is probable that it may be caused by rheumatism, and that the wasting of the extensors seen in chronic rheumatoid arthritis is due to a neuritis of the neighbouring nerves. There is also an *idiopathic* multiple neuritis.

The symptoms consist in more or less widely distributed atrophic paralysis. Ross has never been able to assure himself that active spasm preceded the paralysis in any case. The condition of the cutaneous reflexes varies. With a very few exceptions, the patellar reflex has been wanting in all recently reported cases of alcoholic, diphtheritic, and other forms of neuritis of the lower extremities. The knee-jerk is sometimes absent in lead poisoning, even when the muscles of the lower extremities are not appreciably involved. Yet the failure of the patellar reflex is a valuable but not an absolute sign of neuritis. The electrical test affords conclusive evidence in the majority of cases. The faradic excitability of the affected nerves and muscles is lessened or abolished, and the reaction of degeneration is detected with the galvanic current. The paralysis affects especially the extensors, as is well seen in the "wrist-drop" of lead palsy. That following alcohol, bisulphide of carbon, the animal poisons, and even arsenic, usually attacks the extensors of the lower extremities first. Paralysis of the extensors of the forearm soon follows in alcoholic neuritis, then the thighs and upper arm, then the flexors of the leg and forearm, and finally even the muscles of the trunk may become involved. In diphtheritic paralysis the soft palate is the first to be affected; then the muscles of the eye, and after some time the lower extremities. The arms are seldom involved. The paralysis of the extensors in neuritis produces a temporary or permanent flexion of the limb, simulating a spasm of the flexors. The sensory disturbances accompanying the paralysis resemble considerably those of locomotor ataxia. The disease may most easily be confounded with chronic poliomyelitis, Landry's paralysis, and locomotor ataxia. From the first it is distinguished by the presence of well-marked sensory phenomena, and by the order in which the muscles are attacked.

From the second it differs in exhibiting the reaction of degeneration with marked sensory disturbances and wasting of the muscles. From the third it differs in many respects, but the character of the gait is sufficient to distinguish it. We observe, namely, in neuritis a peculiar elevation of the knee in walking, with a drooping of the toes, and an unusual exposure of the sole of the foot to one standing behind the patient Such a case is unable to elevate the toes if sitting on a chair with the soles flat on the floor.

As regards the pathological anatomy of the disease, the author shows that opinions are now generally agreed that the lesion is seated in the nerves themselves and not in the cord.—*Am. Jour. Med. Sciences.*

THE TREATMENT OF TUBERCULOSIS OF THE JOINTS BY ACID CALCIUM PHOSPHATE.—At a recent meeting of the Society of Physicians of Vienna, Kolischer, of Vienna, exhibited four cases of tubercular joints, three of which had recovered, while the fourth was in process of recovery, under a method of treatment which he had recently introduced, which aimed at the destruction of tubercle bacilli and the induction of calcification in tuberculous matter, in imitation of the process often observed in healed lung cavities. It is supposed to act by producing a mild grade of inflammation and cicatrization which destroys tuberculous matter. The method consists in the injection into the diseased joints of a solution of acid calcium phosphate, whose strength and dosage are not reported.

In one class of cases a prompt inflammatory reaction followed the injection, lasting from four to seven days, and was succeeded by a period of calcification which continued from two to four weeks, ending in absorption; the final result was a restoration of the contour of the joint. In the other class of cases—those in which cheesy degeneration was rapidly progressing—injections into the joints were followed in about a week by the breaking down of tubercle and the rupture and discharge of the abscess; and healing by granulation resulted promptly. Cicatrization of tuberculous ulcers and separation of necrosed bone were readily caused by the solution. Tuberculous fistulæ and cavities were tamponed by gauze saturated with the solution

The cures exhibited were two cases of acute tuberculosis of the elbow-joint in children: the results were normal contour, good motion, absence of all general symptoms. Also a case of knee-joint tuberculosis, under treatment six weeks, whose gait and symptoms were greatly improved. The fourth case was a man, whose carpal joint had been acutely tuberculous; result normal contour, the joint capsule filled with calcified material; slight movements of the fingers possible.

Albert, Maydl, and others of the surgical staff of the Vienna Krankenhaus, fully endorsed the favorable statements of Kolischer.

While these cases are too few to pass a final judgment upon, they are highly suggestive. The results of this method, so far as contour and mobility are concerned, are greatly superior to anchylosis, or excision. The danger to life is apparently less than even under antiseptic resections; the time consumed by the treatment is no longer than by excision. It remains to be proved, however, whether the nidus of the tubercular infection is as thoroughly destroyed by this method as by excision, and the use of iodoform.—*Med. News.*

PRECOCIOUS CHILDREN.—The precocious child is constantly saying things so epigrammatic and brilliant as to call out the wonder of admiring parents and relations; and oftentimes these strange unnatural utterances are made the subject of remark in the presence of the child, and some newspapers often devote a column to this bright and abnormal child-talk. Nothing could be more harmful than such encouragement of a condition that is out of all harmony with healthful mental and physical growth. As a rule, the precocious child is of a strumous or scrofulous diathesis, with a fair, brilliant complexion, blue eyes, and golden hair, beautiful to look upon according to popular standards. He is delicately sensitive to mental impressions, and alive to the conversation of persons much older than he. He generally goes on his unique career, outstripping his brothers and sisters, as well as his schoolmates, in the committing of tasks at school, as well as in the reading of books far beyond their comprehension.

This generally goes on until the age of puberty, when he begins to falter. The hectic flush is seen upon the fair cheek, the eyes become more brilliant, and the finer and the spiritual elements come out with almost supernatural intensity. By and by a slight cough arrests the attention; and, before the fond parent is aware, phthisis tuberculosis has laid the foundation for premature death. Now, what shall be done to save such children, and make them develop into healthy men and women? First, we would say, *Let them severely alone.* By this we mean, do not encourage the precocious development by pushing the child ahead, and showing the foolish weakness of exhibiting the child to visitors, or displaying him at the performances of Sunday-school concert or public-school exhibitions. We always pity the poor victims of such scenes, who come before audiences, and recite standard poems or sing *cavatinas*, to astonished crowds in heated rooms, amid the glare of gas-lights, and dressed in tawdy finery, irrespective of the climate or weather. When we look upon their pale faces and attenuated legs, we wish we had the power to send them home and put them

to bed. Second, be simple with such children; keep them young, and encourage them to talk child-talk, to read child-books, and to play with other children. Do not let them remain in the house in company with the older folk, when the bright sun is shining, and the other children are romping upon the green with all the glorious freedom of childhood.

Of paramount importance is the physical training of the precocious child. From the very nature of the case, all undue excitement must be avoided. The full quota of sleep must be insisted upon. No late hours should be allowed, full of the amusements that are such a strain upon the nervous system. The diet should be of the simplest character, consisting of food containing all the elements of nutrition, like milk, bread, and soups. Confections, condiments, and fancy dishes should never be set before children. Give fresh air in abundance, and insure the child to go out of doors in all kinds of weather.—*Popular Science News.*

THE LOCAL TREATMENT OE DIPHTHERIA.—Dr. J. Henry Fruitnight, of New York, sends us an interesting communication on this subject, which the crowded condition of our columns compels us to present in abstract. As the disease presents both local and constitutional symptoms, we ought, he argues, to treat it both locally and constitutionally. Many of the remedies employed exert a local effect as they pass over the parts while being swallowed, and, in order to increase this effect, he advised patients, who are able to do so, to retain the dose for a time in the buccal cavity. "In the recent discussion of this subject, no mention was made of one remedy formerly used for its constitutional effect, but which I have employed for its local action. I refer to the hyposulphite of soda, the use of which was suggested to me by Dr. Brickelmaire, of this city, in an informal conversation some time ago. Since then I have treated eight cases of diphtheria with this remedy, giving hourly doses of ℥j. of a solution of the strength of ℥j. to ℥ij. of water. In two of these cases the pseudo-membranous deposit was very thick and tenacious. In all there was a gradual lessening and disappearance of the membrane from hour to hour. The patients retained the solution in the mouth several minutes before swallowing it. No other local remedies were employed, though the general condition of the patients received proper attention. In one case, which is now under treatment, the deposit is very great and extends downward to a considerable distance. In this case gentle local applications are made by means of a brush. I have not yet had an opportunity to use the remedy when the disease has invaded the larynx, but intend to employ it in the spray-atomizer in the first case of this kind which presents itself. I shall also use the same method when the patient is too young to hold the solution in the mouth before swallowing it. The hyposulphite of soda has also, very probably, a constitutional action, but it is to its use as a topical agent that I now specially wish to direct attention. I disclaim, however, the notion that it will cure in every case, for we all know that some cases will inevitably succumb to the disease despite any and all forms of treatment. As to the manner of making local the applications, the gentler and more intelligently local applications are made the more favorable are the results likely to be; therefore the spray-atomizer is to be preferred in all cases of the buccal and laryngeal forms of the disease. A suitable syringe, carefully used, is to be recommended for the nares and posterior pharynx. As regards the various remedies recommended for use in the spray-atomizer, I have had a greater percentage of recoveries with trypsin than with anything else.—*Med. Record.*

THE EXAGGERATED DANGERS OF COCAINE.—Dr. J. R. Rankin, of Muncy, Pa., writes that he has never seen any alarming effects follow the use of cocaine in his practice, although he has employed it quite extensively. In every case, however, he first assured himself, by careful examination, that there was no heart-disease present, and if there was, he withheld the drug. He first used the remedy in asthma, in August, 1885, inserting from five to ten drops of a ten-per cent. solution into the nostrils, the dose varying according to the severity of the asthmatic paroxysms. The patient was completely relieved by the daily use of the remedy, and suffered from no unpleasant symptoms of any kind. He has had a like experience with another case of a similar nature. These patients used, on an average, from three to four grains daily. He has also employed cocaine, in the form of spray, in laryngitis and catarrhal fever, with most satisfactory results. In a case of gastritis, occurring repeatedly in the same individual, this remedy has been employed with benefit, in doses ranging from one to six grains. The symptoms following the exhibition of these large doses were, reduction of the pulse from 92 to 68, of the respiration from 22 to 15, slight difficulty in speaking, cooling of the skin, copious perspiration, and mental exhilaration. When a dose of six grains was given, there was slight confusion of ideas for a few minutes. Dr. Rankin adds that he has used cocaine subcutaneously in a few cases, but likewise without the production of any symptoms of an alarming nature. He does not think that we should be deterred from using so valuable a remedy because it is poisonous in large doses, or because some have acquired the cocaine habit. Such arguments would apply with equal force against the use of opium, belladonna, and a number of most valuable remedial agents.—*Med. Record.*

Poisoning by Pennyroyal.—Dr. J. Girling writes the *Brit. Med. Jour.:* The rariety of poisonng by pennyroyal or oleum pulegii is emphasized by the fact that standard works on toxicology, like Guy and Taylor, contain no account of the toxic symptoms produced by this drug, nor any indications as to appropriate treatment. Moreover, I find on enquiry that recurrence to pennyroyal is very common when menstruation has ceased suddenly, and that it can be procured with the utmost facility. These considerations have led me to describe the symptoms and the treatment employed in the following case. About an hour after the drug had been taken I found the patient (a woman aged 40) in an extremely collapsed condition. The face was pale, cold and bedewed with beaded sweat, and the hands and feet were cold and clammy. She lay apparently unconscious, but could at first be roused by shaking and shouting to her, rapidly sinking, however, into a state of profound coma. The pupils were normal in size, and responded to light. The action of the heart was exceedingly weak, irregular, and fluttering, the pulse at the wrist being scarcely perceptible. The first cardiac sound was almost inaudible, while there was distinct reduplication of the pulmonary second sound. There was jactitation and feeble retching, with much salivation, but no vomiting and no purging; temperature 97° F. The breath smelt very like peppermint. The treatment adopted was as follows: First, I gave her three-quarters of a tumblerful of water, followed immediately by a hypodermic injection containing one-fifth of a grain of apomorphine. This latter quickly produced the desired effect, the vomited matters having a strong peppermint-like odor. After the vomiting the patient seemed about to die, and having no ether with me I administered brandy hypodermically. The result of this was excellent; the heart-sounds at once began to improve in tone, and the pulse in force, and in twenty-four hours the patient was practically well. Thus the symptoms taken together seem to point to severe cardiac depression approaching to paralysis, and appear to indicate that pennyroyal should be classed among the narcotic heart poisons. It transpired afterwards that the woman had taken ℥j of the essence of pennyroyal (which she had obtained from a chemist), and which is composed of ʒj olei pulegii to ʒvii of spirit.

Antiseptic Tamponnement of the Vagina in the Treatment of Pelvic Inflammations.—(Dr. James H. Etheridge, Gynecological Society of Chicago.) What I have to present refers to tamponnement of the vagina and supporting the uterus in cases of pelvic trouble, notably of inflammation and enlargement of the uterus, and as the work has grown upon me, other complications in the way of pelvic trouble have also been treated with a result that has rather surprised me. For it I claim nothing original. The material that I use is a preparation of wool that is called "antiseptic wool." This wool is finely carded, free from all oil and foreign substances. A piece is cut off, of such a length as will fit nicely into the vagina, and then with the patient in the genu-pectoral position, with the perineum retracted, this is stuffed into the vagina and left there. The upper end of this tampon can be soaked in an antiseptic solution, as boroglyceride or listerine, and with a piece of string attached to the lower end of it, the patient can remove it and douche the vagina, in readiness for the next tampon, and in this way tampon after tampon can be introduced and the uterus held up to the highest possible level, and advantage taken of the natural drainage from the uterus of the superabundant amount of blood. The inflammations of the uterus we are usually called upon to treat are not active, but chronic, and if we hold the uterus up so that it can drain itself properly through the veins, the nutritive changes which take place will be facilitated to the greatest extent. A small Sims' speculum can be applied without trouble to the patient, and this wool can be pushed into the vagina, so that when the patient gets up she has a soft elastic cushion for the uterus to rest upon. In this way the greatest comfort is at once experienced. . . . These tampons are removed after four or five days without the slighest odor upon them.

When the uterus is enlarged it beomes heavy, sinks, and presses the veins which carry the blood out of the uterus, and we have strangulation. By raising the uterus up, the blood flows freely and the nutritive changes tend always to health. One outgrowth of the use of this tampon may be that many cases of laceration of the cervix now operated upon may escape operation. I have been surprised to see how very nicely patients get along, even though they have extensive lacerations, under this treatment.—*American Journal of Obstetrics.*

The Treatment of Internal Hemorrhoids by Injection.—(Dr. Q. A. Shuford, of Tyler, Tex., in the *Medical Record*): "In the treatment of internal hemorrhoids by submucous injection, it is necessary, in the first place, to have an instrument that can be introduced with the least amount of pain, and so constructed as to expose as much of the mucous membrane as possible. When a tumor is discovered the speculum should be manipulated so as to bring the center of the tumor into plain view, and the needle should puncture the pile at this spot, as it is here less sensitive than elsewhere. This requires a long needle, which should have a guard near the point, so as to prevent it from entering too deeply. For small tumors I inject from three to five drops, and for larger ones from five to eight drops of the following mixture: Rub

well together one drachm of salicylic acid and one and one-half drachms of glycerine, and add two drachms of carbolic acid; then rub together one drachm of borax and one and one-third drachms of glycerine, and mix the two thoroughly, allowing the mixture to stand until clear. The chemical changes and *modus operandi* of this combination I do not know; but I do know that internal hemorrhoids treated in this way become atrophied, shrink up, and peel off without pain, inflammation, or suppuration. I have never had any trouble nor heard any complaints from patients so treated. The two essential points in the treatment of internal hemorrhoids are: First, an instrument that will bring the parts to be treated into view, and that without pain; and, second, a remedy that will completely destroy the pile, while leaving the mucous membrane in a healthy condition. An interval of from eight to ten days should be allowed to elapse between the injections, so as to give the mucous membrane time to become toughened. The injections cause almost no pain, and do not prevent the patient from pursuing his ordinary avocations." Dr. Shuford reports several cases treated after this method, and adds that he has treated nearly one hundred, of varying degress of severity, and in none has he seen any inflammation or suppuration following the injections.

BORACIC ACID IN THE TREATMENT OF LEUCORRHEA. — From the excellent results which are yielded by boracic acid packing in chronic suppurating otitis, Dr. N. F. Schwartz (*St. Louis Courier of Medicine*, June, 1887) was led to employ it in a case of leucorrhea, which had resisted the most persevering use of the ordinary remedies. The experiment was successful within a fortnight, and the patient has remained well for several months since. Dr. Schwartz states that he has been equally successful in a number of other cases. His manner of using it is as follows: Having first irrigated the vagina with water at as high a temperature as can well be borne by patient, a cylindrical speculum is introduced, and the vaginal walls very carefully dried, first with a soft sponge and then with absorbent cotton. This done, boracic acid in crystals is poured into the mouth of the speculum, and pushed up against the uterus and vault of the vagina, with a clean cork caught in a uterine sponge-carrier, sufficient acid being used to surround and bury the intravaginal portion of cervix, filling the upper part of vagina. A tampon of absorbent cotton is then firmly pressed against the packing, and held *in situ* until the folds of the vaginal walls close over it as the speculum is withdrawn.

This should be allowed to remain three or four days, or even longer, as after this time there still remain some undissolved particles of the acid, nor will the tampon seem at all offensive. The ostium vaginæ, if examined in twenty-four hours, instead of being besmeared with the leucorrheal secretion or discharge, presents a clean appearance, and bathed in a watery fluid, which begins to appear several hours after the packing has been placed, and in his cases this was the only discharge noticed afterwards.

However, a second or even a third repetition may be necessary, but in none of his cases, numbering nearly a score, has he found more than a second packing called for, and in many one sufficed; and in no instance has its use occasioned pain, nor even inconvenience.—*Ther. Gaz.*

HOW TO PRESCRIBE SANTONIN.—Dr. Norderling, of Rockford, Ill., gives a very clear account of how santonin should be prescribed to obtain its full physiological effect. In order to accomplish its therapeutic object, it is necessary, first, that santonin be in a form in which its vermicidal action can be exerted; and secondly, that it reach the habitat of the parasite. Santonin is insoluble in water and dilute acids, but dissolves in the saliva, and the gastric, intestinal and pancreatic juices. Solution in the gastric juice takes place so rapidly that the maximum dose is completely absorbed in the stomach, and taken into the circulation before reaching the intestine. Consequently, in order to obtain its vermicidal effect, it must be administered in such a form that it will not be acted upon by the gastric juice. It has been proved by experiment that santonin, when given in an oily solution, is not at all absorbed in the stomach, the entire quantity passing into the intestine; and Küchenmeister has shown that whilst ascarides are not affected by santonin crystals floating in water, they are killed when brought in contact with an oily solution of the drug. In such a solution, any form of oil may be used, and the best effect is obtained by three grains of santonin dissolved in two ounces of oil, to be taken in four doses. It is good practice to add one drop of wormseed oil to each dose, all volatile oils being poisonous to the lower organisms. If movement of the bowels is desired, castor-oil will be suitable, although not in too large a dose, because with strong peristalsis the santonin does not remain long enough in the intestine to produce the desired effect. About two drachms of the oil to each dose will be sufficient.—*N. Y. Med. Rec.*

GASTRIC ULCER.—Ulcer of the stomach is probably a much more frequent disorder than is generally recognized. On the other hand it probably is often believed to exist when not present. Our own experience has led us to think that the positive diagnosis as to its existence or non-existence is in some cases impossible. It may be simulated by chronic gastric catarrh or by neurosis of the stomach. Pain after eating, with vomiting, and

epigastric tenderness are very common in hysterical women, especially in girls shortly after puberty. The absence of blood from the vomit is not of as much importance from a diagnostic point of view as appears at first sight. Hysterical vomiting is not rarely accompanied by slight or even pronounced hæmatemesis, and we have seen fatal ulcer of the stomach without hemorrhage, and, indeed, without a history of vomiting. Gastric ulcer is of course not infrequent in young hysterical girls, but that the gastric symptoms are often not due to any stomachic ulceration is proven by their occasional sudden disappearance.

Our own experience is, that in many of these neurotic cases a quarter of a grain of nitrate of silver with a grain of hyoscyamus, accompanied by soft diet, is efficacious. If however, it fails to do good in the course of a very few weeks, its use should be abandoned, and the treatment be that of hysteria, with a use of diluted nitro-muriatic acid at meals.

In a recent article in the *Medical Press*, Dr. W. H. Pearse calls attention to the fact that many of these cases do best when the eccentricities of diet are given full swing. If the patient prefers smoked and salt fish, salt meats, pickles, onions, or even Dutch cheese, he allows the article to be taken with asserted good results. A favorite article with him seems to be one which is not much used by the Anglo-Saxon race in America, namely, "potatoes with vinegar." Whether by this is meant the potato salad beloved by our German brethren or not, we do not know.—*Ther. Gaz.*

Corrosive Sublimate in Intra-Uterine Irrigation.—Dr. Braun, from recent observations, has arrived at the following conclusions concerning the use of corrosive sublimate in irrigation of the uterus and vagina: (1) Vaginal or intra-uterine irrigation is frequently followed by absorption of the injected liquid; (2) When this occurs, mercury is quickly detected in the feces; (3) If the return of the injected liquid be in any way prevented, absorption occurs rapidly; (4) The 1 in 1000 solution of sublimate should be used only in serious cases, such as tympanites of the uterus, putrefaction of the fetus in the uterine cavity, or septic puerperal fever. The injection should not occupy more than a minute in the performance, and should be followed by a copious injection of distilled water. (5) The 1 in 4000 solution should be injected only in cases of expulsion of a macerated fetus or in endometritis consecutive to the expulsion of the fetus in premature delivery; (6) This solution may be of service in puerperal endometritis, accompanied by a fetid vaginal discharge; in these cases irrigation should be followed by an injection of pure water; (7) Irrigation should be performed only by a medical man; (8) Irrigation with corrosive sublimate should seldom be employed in women suffering from extensive wounds of the vulva, in those who have been taking mercurial preparations, in cases of atony of the uterus, in anæmic women, or in patients suffering from disease of the kidneys. —*Brit. Med. Jour.*

Tracking Scarlet Fever.—A very close piece of inductive reasoning was presented lately to the Royal Society by Professor Klein. In his endeavors to ascertain the cause of an outbreak of scarlet fever, he showed, first, that certain minute plants —micrococci—were always associated with the disease, then he isolated these germs, cultivated them in the way familiar to those who study these organisms, and then inoculated previously healthy animals with the germs, with the result that the disease was induced. Following up other clues, the cause of the outbreak in question—that at Hendon—was traced to a particular dairy farm, then to a particular cow, and, still further, to one particular teat. It was shown that milk from the other teats was free from germs, while that derived from the teat in question contained germs capable of producing the disease in other animals. The infecting germs came from the ulcerated teat, so that the milk itself, even from this teat, would be free from germs if means could be taken to avoid contact with the sore spot. Hence we have here the cause of scarlet fever tracked home, and the means of prevention are clearly indicated. The anti-vivisectionists may disapprove of these experiments, but no one who has had experience of the horrors of malignant scarlet fever, or who has any sympathy with suffering animals, will doubt that the permanent benefits conferred on man and on animals enormously outweigh the relatively slight amount of harm done to the few animals experimented on.—*Col. & Clin. Record.*

Sweet Milk Diet Entirely Prohibited in Cholera Infantum.—Milk, in any form, in acute diseases, when the temperature is 102° or more, is more or less injurious. But I wish, in this communication, to direct the attention of the profession to prohibiting sweet milk or breast milk in cholera infantum and diarrheas of children, and dysentery in adults. I am aware that this assertion is contrary to the common custom and usage of the profession, but I have observed, for several years past, that in high temperature sweet milk invariably increases the intensity of the disease. In cholera infantum, in a large majority of cases, the temperature is always high; the child of, say six or nine months old, is constantly nursing the breast, the milk curdling and disorganizing in the stomach, vomiting up large chunks of curdled milk, and, if not thrown up, it forms a foreign body in the stomach and bowels, keeping up irritation and inflammation, and making it detrimental to all medication. It is true, that in cases of chol-

era infantum breast or sweet milk may be used and the patient get well, but we have observed that those cases will improve faster without it.

The general cause of cholera infantum is solar heat, while the local cause varies, which, in all cases, produces congestion and inflammation of mucous surfaces, and the secretions have an acid reaction, sweet milk being alkaline, hence an incompatibility. Since I have discarded milk in cholera infantum, I cure a larger per cent. Use oatmeal, rice and gruel; cold water in limited quantities. Warm drinks quench thrist better than cold drinks.

By withholding milk from the child in this terrible disease, remedies have a better influence, and save a larger per cent. in curing cases.—*Med. Brief.*

THE TREATMENT OF CATARRHAL JAUNDICE.—Dr. Gluzinski, writing in a Polish journal, states that in cases of catarrhal jaundice he has found excellent results follow the treatment recommended by Krull, viz., the repeated injection into the bowel of large quantities of cold water. This increases the peristaltic action of the intestines, and removes any mechanical obstacle to the flow of bile. Again, as has been shown by Röhrig and Mosler, who injected large quantities of cold water into dogs, the bile is thus rendered both more liquid and more abundant, so that it more easily overcomes any obstruction. At first, water at 59° F. is injected into the bowel until the patient complains of a feeling of distention in the abdomen. He is then made to retain it as long as possible. Most patients manage to retain two litres for from a quarter to half an hour. The next day the enema is repeated, but with water about 4° higher. The temperature is again raised on each succeeding day, but when 72° has been reached no further increase is made. The reason of the increase is that the repeated introduction of cold water is apt to irritate the mucous membrane of the bowel. Altogether four or five enemata are sufficient to produce the desired effect. The increase of the biliary secretion may be judged of by the color of the feces. Of course, the diet is attended to in order to prevent a recurrence of the affection.—*Lancet.*

A DAKOTA DOCTOR.—The board of health of Dakota publishes the results of an examination of an applicant for a licence to practise medicine. He had been practising medicine for years in a populous district of South Dakota. Here are some questions and answers:

Question. What medical journal do you take, doctor? Answer. Well, they have all run out.

Q. Don't you intend to take any of them again? A. Well, I can get along without them.

Q. What books have you in your library? A. "Gunn's Family Physician and Common Sense Home Doctor."

Q. What is an element? A. Oh! anything.

Q. Is that bed an element? A. Yes.

Q. Name the three great cavities of the body. A. The head, the belly, and the diaphragm.

Q. Mention the contents of the cranium. A. The brain and three skins.

Q. Name contents of abdominal cavity. A. Kidneys and the prostate gland.

Q. Does the prostate gland ever become enlarged? A. Yes.

Q. Have you treated any cases of enlarged prostate? A. Lots of them.

Q. With what success? A Tip-top! Never lost a case.

Q. Do you ever treat any female for enlarged prostate? A. Oh, yes; numbers of them.—*N. Y. Med. Record.*

IS THE DANGER OF POST-PARTUM HEMORRHAGE INCREASED BY THE USE OF ANÆSTHETICS DURING PARTURITION?—Dr. Fordyce Barker says that his experience with anæsthetics in labor had been limited, since 1850, almost exclusively to chloroform, which he regards as preferable to ether—because the odor is less disagreeable; because it is less irritating to the respiratory tract; because it is more quickly effective, and in less quantity. It should be used intermittently, only at the time indicated. Dr. Barker employs chloroform to relieve pain in most cases of normal labor, and says that heart disease in not a contra-indication to its use when any anæsthetic is called for. He believes that with proper care no woman should die of post-partum hemorrhage due solely to uterine inertia. Chloroform hastens much oftener than it retards labor. It could not be shown to exert any injurious influence on mother or child. The only case on record of death after chloroform in labor, in care of a competent practitioner, was one in which the anæsthetic had been preceded by convulsions, and it was not proven that chloroform was the cause of death. Dr. Barker says he has never had post-partum hemorrhage occur in any of his cases except one, and in that chloroform had not been used.—*Boston Med. and Surg. Jour.*

Dr. Samuel E. Woody, Prof. of Chemistry and Public Hygiene, and Lecturer on Diseases of Children, Kentucky School of Medicine, at Louisville, on April 8th, said:—Papine was used in a case of acute dysentery of unusual severity, requiring unusually large doses of opium. The effects of Papine were so purely hypnotic and anodyne that a pound was ordered, and no other form of opium was used during the entire illness. Papine is a Pharmaceutical Triumph.

CHILD-BIRTH AFTER OVARIOTOMY.—Dr. Macaulay writes to the *Lancet*, that he has attended a woman in her seventh confinement, since the removal of an ovarian tumor by Sir Spencer Wells, in 1875.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

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EXERCISE.

We apprehend that insufficient attention is generally paid to the great value of judicious exercise as a remedy, by the large majority of physicians. Many individuals whose occupations do not involve manual labor, exist in a semi-pathological state, as their permanent natural condition. Their health standard is low, bordering on the confines of disease, with poor physical development; proper harmony between the functions of the various organs does not obtain, all because of the continued violation of natural laws, especially that of necessary physical exertion. These unfortunate people are continually breaking down. Existing on the verge of disease, they are subject to the least deleterious influence at all times, and less amenable to remedies when attacked by disease. Their systems are ever in a condition to receive any passing contagious germ, and to propagate and indefinitely multiply these germs, to the great injury of the community.

To this numerous class, out-door exercise and the gymnasium are invaluable. Want of healthy exertion, pure air, and wholesome surroundings are the chief causes of their abnormal condition, and only these can restore, or cause approximation to the normal health standard. Pure air and wholesome surroundings cannot always be obtained, but requisite exercise is at the command of all. For those who are unable to exert themselves, massage supplies the want; for all others, walking, riding, out-door games, the gymnasium, and if necessary, manual labor, will prove more effectual in restoring the proper development and balance, than anything at our command.

We have only to compare the standard of health enjoyed by our laboring classes under favorable conditions, with that experienced by those whose occupations do not involve physical exertion, to recognize the value of properly directed and judicious exercise, in maintaining not only a high standard of health, but in restoring the invalid and convalescent to that standard. How important then, that all should be advised by their physicians to keep up a properly directed system of physical exertion, that they should be instructed to rely more confidently on this as a remedy than on stimulants, tonics, or any so-called reconstructive pharmaceutical preparations. We do not wish to imply that the latter are not useful, or that exercise is the sole remedy, but we do claim that it is of great value and importance in suitable cases, and that it does not usually obtain that recognition and appreciation which its merit demands. We fear we are all too much inclined to prescribe artificial remedies, and neglect the natural.

In considering the effects of physical exertion, let us not forget that, not only the muscles are acted upon, but every organ and function of the body is affected, and in a manner conducive to their natural growth and health. It is unnecessary to enumerate the well-known and thoroughly established results on the circulatory system, the lungs, nerves, skin, brain, viscera, etc., of exercise both in health and disease, as we are not aware of any question or doubts on these points. Exercise, then, adapted to the condition of the patient, intelligently directed, must exert a potent influence in restoring to their natural physiological conditions the depressed organs, and bringing each and all nearer to the normal health standard.

That so many poorly developed and unhealthy people exist among us, is an evidence that too little attention has been devoted to this means of improving the development and health of the community. We should seek to overcome the evil results of our artificial life, which obtains chiefly in cities and towns, by enforcing all possible natural conditions. We are, to some extent at least, the guardians of the health of the community, and should more effectually direct the attention of the

public to this very important means, not only of restoring health, and happiness, but of retaining health and vigor, by acting as a powerful prophylactic against the encroaches of the universal pathological germ, by placing the system in the best possible condition to resist the access of disease, of lessening its virulence, and promoting rapid recovery when under its influence.

CHOLAGOGUES.

One of the most frequent complaints the physician hears in ordinary routine practice, if we leave out the ubiquitous pain in the back, is that the patient is or thinks he is, bilious. The old fashioned blue pill and black draught are perhaps quite as much in favor to-day as they were a hundred years ago. Calomel also is a sheet anchor among cholagogues, and a very reliable one it is. But, while calomel is useful and reliable, Rutherford's experiments with that drug, go to show that it has no stimulant action on the liver whatever. He found that it stimulates the intestinal glands and so perhaps it acts by sweeping or flooding the bile out of the intestines. It is well known that bile which is poured into the intestines is carried back again to the liver, and excreted over and over again, and thus a cycle is established between the intestine and the liver, which Lussana named the "entero-hepatic circulation." Now, stimulation of the liver, need not, as will be readily understood from a consideration of the above named entero-hepatic circulation, relieve the system of its excess of bile, for while some of it is always lost in the fæces, the major portion will be carried back to the liver and simply excreted over again. But, by combining hepatic with intestinal stimulants, we really accomplish this end. Calomel does not stimulate the liver, but corrosive sublimate does. Now, it is clinically certain, that calomel is a very effective cholagogue. How then does it act? The answer is not easy, but the suggestion made by Lauder Brunton is a good one, viz., that a portion of the subchloride may be chemically acted upon in the intestine, so as to form the bichloride, and this exerts its specific action upon the liver. Thus, while administering calomel, we get practically the cholagogue effect of both hepatic and intestinal stimulants. Rutherford showed that a purgative which does not stimulate the liver, actually diminishes the flow of bile. This may be accounted for by the sweeping away in the evacuation of all the bile in the intestine at the time when it began to act energetically, and a consequent diminution of the bile poured into the intestine by the amount which would otherwise have been absorbed and re-excreted. Taking that view, all hydragogue cathartics possess a certain cholagogue action, whether they stimulate the liver or not, relieving the system of just as much bile as, by their mechanical action, they sweep out of the intestine. But again, these hydragogues may lessen the secretion of bile by lessening blood, pressure in the liver.

As an adjunct to cholagogues, ipecac is excellent; especially is this the case when from a catarrhal condition of the gall duct, much tenacious mucus tends to obstruct the free flow of the bile. At the same time it is believed to increase the flow by a positive stimulation of the secretary function of the liver. Among other adjuncts may be mentioned brisk exercise for even a few moments, such as climbing, exercise on the bar, etc., emetics, which by producing vomiting, cause pressure on the liver which does good, as also forced inspiration by causing the diaphragm to compress the liver.

Ringer recommends very highly as a cholagogne, small doses of grey powder, say, one-third or one-sixth of a grain repeated every six hours. He has found excellent results from such treatment.

UNPROFESSIONAL ADVERTISING.

We are thankful to say that we have not had occasion to refer to the above topic for some months, but such a number of instances have been brought under our notice lately, that, wearisome as it may be to our readers, we must make some reference to it. We have this month received communications from different parts of the Province, backed up by articles in local papers, asking that the matter be referred to. Fortunately, at the last meeting of the Ontario Medical Council, a Committee of Discipline was appointed, to take cognizance of such practices on the part of regularly qualified men. This committee consists of the following gentlemen: Drs. Logan, Bray, Day, Russell and Wright, and to them all complaints regarding unprofessional conduct may now, as we understand the matter, be referred. It is a pity

that men, belonging to one of the noblest of professions, will prostitute it, by even *permitting* such notices to appear in local papers. It may occur *once*, through the energy of the ubiquitous reporter but *once* should end it. So when we find notices running through different numbers of the same paper, the most charitable of us can only conclude that the underhand advertising is done with the full sanction, if not connivance, of the surgeon whose skill in the use of the knife is held up before an admiring and awe-stricken public. We say surgeon, for it is almost entirely in the domain of surgery that these men make their mark. There is not enough of the "penny dreadful" in medicine to hold the attention of the readers of these notices. Ovariotomy seems to be having a run just now, perhaps because it is so fashionable.

No one can contemplate such advertising without condemning it. Let us hope that our Committee of Discipline may, in their wisdom, find some effectual means of combating this evil, and that a healthier professional spirit may soon be found in the land.

TIGHT LACING.

Did any one ever hear a lady admit that she ordinarily wears her corsets very tight? or that her boots are constantly worn a size or more too small? We think not, and this in the face of the fact that her face is—while she is speaking to you—blue, from want of sufficient air, or she is obliged to hobble when attempting locomotion. It has been so from the beginning, and we fear will continue to the end. Medical men and others who are given to "preaching" on this subject, will now have a good text for their discourses. A maiden of fifty-two summers is reported, in the *British Medical Journal*, as having lately died suddenly from the effects of tight lacing. This opinion as to the cause of death was freely expressed by the surgeon in attendance, Mr. Varne, of the North-West London Hospital. If those women who go about with waists like wasps, irrespective of the size of the hips, shoulders or bust, could but see themselves as we of the male sex see them, there would be, we believe, a sudden cutting of countless corset strings, and the free introduction of air into the lower lobes of hundreds of thousands of lungs, which now do not perform their function, or at best perform it very imperfectly during sixteen or eighteen hours of the twenty-four.

The victim referred to above was old enough to have known better, but there is no limit to the foolishness which women of all ages, who are devotees of fashion, will practise. We have given all the particulars we can in this case, and hope they may be useful in pointing advice to the fair sex, from those who would see them enjoy the most robust health possible to beings with a uterus and two ovaries arranged on the plan they are in the human female, which as we heard pertinently remarked the other day by a medical man, seems a rather poor plan. The great difficulty will be to get the sufferers to admit that they do "lace tight."

THE INTERNATIONAL MEDICAL CONGRESS.

In hope that this number of the LANCET may reach our readers in time, we wish to draw attention to railway fares to Washington, for the Medical Congress. Dr. J. E. White, of this city, has completed arrangements with Van Every, whereby intending visitors may leave Toronto, by steamer *Empress of India*, at 2 p.m., Saturday, September 3rd. The ticket carries holder to Washington, *via* New York and Philadelphia, good for fifteen days, for $14, inclusive of Pullmans both ways. This arrangement will give intending visitors a week in Washington for the Congress, and another week wherever they choose, leaving New York, say, for home on Saturday the 17th. The party of medical men who will leave Toronto, will number between forty and fifty. Hotel arrangements have been made with the Riggs' House, where the local committees have their offices. Members of the Canada Medical Association may connect with the excursion at the Bridge, on Saturday (3rd) afternoon, and receive the benefit of the reduced rate. Parties coming to Toronto will pay full fare to this point, and will receive a certificate from their local ticket agent, upon the presentation of which, tickets will be issued for the return at one-third fare.

IVY POISONING.—This troublesome affection has so many vaunted remedies, and yet is so often intractable to treatment, that the following (*Popular Science News*) may be of interest, showing as it

does a practical mode of obtaining the most satisfactory results from a remedy which is often very beneficial.

"I have always been so extremely susceptible to the poison of poison ivy and oak as to give me great annoyance, unless it is immediately checked on its first appearance. This, common washing-soda accomplishes for me, if properly applied. I make the application by saturating a slice of loaf-bread with water, then cover one surface with soda, and apply to the eruption, the soda next the flesh. When the bread is dried by the animal heat, I drop water on the outer side, so as to keep it thoroughly moistened, and dissolve the soda crystals in contact with the skin. This, you will perceive, is merely a bread poultice; the bread being a vehicle through whose moisture the soda reaches the humor. I find that the washing or bathing with soda water, even continuously, will not suffice with me. My skin requires the heat and moisture of the bread in order for the soda to act on and neutralize the poison. I rarely have need to retain this soda poultice for more than thirty minutes on any affected part. No pain ensues. Formerly I suffered often for weeks, as the poison would spread all over my body. Now, thirty minutes measure the duration of its exhibition."

When cases go on to suppuration, calcium sulphide in quarter grain pills every 6 hours is indicated, and will, we believe, be found extremely useful.

ANTIPYRIN AND THALLIN IN THE TREATMENT OF TYPHOID.—Dr. Francis Minot, of Boston, has formulated the following (*Jour. Am. Med. Assoc.*) as the result of the study of twenty-four cases of enteric fever, treated by antipyrin and thallin, at the Massachusetts General Hospital:

1. Both antipyrin and thallin have a remarkable power of reducing the temperature in typhoid fever. 2. In no case was the use of these refrigerants apparently followed by any unfavorable effect upon the course of the disease. 3. The general condition of the patient was more comfortable after taking antipyrin and thallin, which were often followed by sleep. 4. The refrigerant medication by antipyrin and thallin appears to have no specific or decided effect upon the course or issue of typhoid fever. It often contributes much to the patient's comfort, and perhaps indirectly promotes his safety. 5. The effect of antipyrin and thallin in promptly lowering the temperature, shows that the danger in typhoid fever does not consist in high temperature alone, and that the latter is rather an index of the violence of the abnormal condition which we call fever, though, perhaps, adding somewhat to the danger. 6. By the internal use of antipyrin and thallin, all the effects which are claimed for the treatment of typhoid fever by the cold bath, are readily obtained without the trouble and inconvenience of the latter method, and without exposing the patient to the dangers of exhaustion and shock, consequent on the fatigue of removal from bed. 7. These remedies may be given without danger to the youngest patients in suitable doses, and indeed, their beneficial effects are more decided, and the unfavorable consequences less observable than with adults.

MALARIAL FEVER.—Dr Jones, of New Orleans, in *Gaillard's Medical Journal*, gives abundant theory regarding the phenomena of malarial fever, in part as follows;

The phenomena of malarial fever are due in part to the destruction of the colored blood-corpuscles, in part to the derangement of the normal chemical changes of the blood and organs, and in part to the toxic action of the chemical compound developed by and resulting from the action of the micro-organisms. The active febrile phenomena of malarial fever are, in their ultimate results and products, *antiseptic*; they tend to inhibit the development of, and even do destroy the morbific ferment of malarial fever.

Many of the most destructive and fatal effects of malarial ferment occur in cases in which the paroxysms succeed each other in an almost imperceptible manner. The recurrence of paroxysm in malarial fever is due to the partial destruction of the micro-organisms during the active and pronounced chemical changes of the fever. When not wholly destroyed during the febrile stage, the micro-organisms are produced, again and again, at definite intervals, induce disturbances of the system, alterations of the blood and oscillations in the temperature.

Such agents as quinine, arsenic, and the preparations of mercury act as poisons to the micro-organisms of malarial fever, excite an antiseptic

effect upon the blood, bind the oxygen more closely to the hemoglobin and proteids, and directly promote elimination, through the alimentary canal, the skin, and the kidneys, of the noxious products of the morbific ferment, and of the increased and altered chemical actions.

To avoid Rupture of the Perineum during Labor.—In regard to this important and much vexed question, Dr. Berry Hart (*Ed. Med. Jour.*), says:—"All the attendant can do, apart from the familiar means of relaxing perineal spasm by choloroform and hot applications, is to prevent the sinciput being forced down in advance of or faster than the occiput. He restrains the fœtal head from passing too rapidly. He thus has always to get the occiput to lead, and to get it fully born first if possible. So far as I can judge, the best way of doing this is as follows: With the patient lying, of course, on her left side, the attendant places the the thumb of his right hand, guarded by a napkin soaked in hot sublimate, in front of the anus and presses it gently there. The pressure is not in the direction of a line joining his thumb and the pubic arch, but nearly in that of the axis of the pelvic outlet. By this, descent of the sinciput is hindered, and that of the occiput favored. When the latter is beginning to pass under the pubic arch, the fingers of the same hand are placed between it and the apex of the arch, so that when the occiput has cleared the arch, the fingers are passed towards the nape of the neck, and the head thus grasped in the hand, the thumb lying over the sagittal suture. This gives one complete command over the head, which is now engaging in the diameters between the nape of the neck and forehead and face, and allow the whole passage with as little tear as possible."

Treatment of Heat Stroke in the British Army.—The following is the treatment (*Br. Med. Jour.*), described by Surgeon C. Douglass Hunter, as that which he has successfully practised among the English troops in the tropics:—"Treatment must be immediate and thorough. The patient should be stripped and laid in the coolest place possible—in the shade outside is best—and cold water dashed on the head and spine; this should be maintained; a large enema administered, and the lower bowel well emptied. If the patient regains consciousness, he may then be placed on his bed (if the temperature remains high) in a wet pack, and ice kept to his head. Five grains of calomel may then be administered, and diaphoretics given frequently. To promote free action of the skin and maintain the action of the bowels, is very needful. If a relapse threatens, douching should be at once resorted to. If there are no signs of rallying, use sinapisms to the heart, frequent douching, ice to head and spine, friction of the limbs; if the pulse is failing, brandy at frequent intervals in small doses and brandy enemata. If respiration is failing, artificial respiration should be employed and well kept up. On no account give up every attempt until life is quite extinct. On no account bleed the patient. The after-treatment is to maintain free action of the skin and bowels—tonic and change of air to a temperate climate.

"The essence of treatment is to reduce the bodily temperature as speedily as possible, and the surest way to do this is by the application of cold water and ice; this should be maintained, and the least relapse dealt vigorously with in the same way. Immediate action of the bowels by enemata is very necessary, and an emetic is beneficial in suitable cases."

A Movable Sheet for the Sick.—The following, by Dr. Roche (*Pop. Scienc. News*), is of practical value:—I have found the following a valuable arrangement for the sick needing change of position, or, as is often the case, a weak nurse to perform the labor, or in cases of surgery, where the safe and easy movement of the patient is necessary:

Fasten smoothly to the mattress, with strong safety-pins, a rubber blanket or piece of enamelled cloth, rubber or enamel side up. Upon this, place a similar rubber or enamelled cloth, if possible somewhat wider, so as *always* to keep the under one covered. Cover with a sheet, and make up the bed as usual. Between the rubber or enamelled surfaces sprinkle soapstone powder, kept by all shoe-dealers, or glove-powder; or, if nothing better can be had, the common graphite, known as stove-polish, will do. Now, by grasping the edge of the under sheet and upper enamelled cloth at the same time, it will be found easy to *roll over* or move the heaviest person with slight effort, and

little pain or straining, either to nurse or patient. If the device prove too slippery when not wanted, a few strong pins fastening it to the bedding beneath, will prove sufficient to prevent it.

TOILET PREPARATIONS.—The following, taken from a report submitted to the Hygienic Council of Paris, by Drs. Dubrisay and Chatin, may be interesting as showing the deleterious influence of various articles of the toilet, such as hair dyes, cosmetiques, etc. Though they are usually advertized as "vegetable, and perfectly harmless," an analysis shows they are all more or less noxious. We copy a part of the report from the *Med. and Surg. Reporter:*

"Progressive dyes" are ammoniacal solutions of nitrate of silver. The "instantaneous dyes" are a solution of litharge in lime water. "Eau des Fées" is a solution of sulphate of lead in hyposulphite of soda. "Eau Figaro" consists of three solutions: (1) of nitrate of silver and sulphate of copper; (2) sulphide of sodium; (3) cyanide of potassium (to remove the silver stains). "Eau des Fleurs" is composed of rose-water, 95·5; flowers of sulphur, 2.7; acetate of lead, 2·8. Passing to cosmetiques, they say "Lait antiplelique" is composed of corrosive sublimate, 1·7; oxide of lead, 4·22; sulphuric acid and camphor. "Lait de Manille" is a mixture of borax, copper, tincture of benzoin, and essence of bitter almonds; "Lait de Ninon," of bismuth and zinc; "Eau Magique," oxide of lead and hyposulphate of zinc; "Eau de Fleur-de-lys," protochloride of mercury; "Eau royal de Windsor," glycerine and oxide of lead; Eau de Castille," hyposulphite of soda and acetate of lead. The "Poudre Pilivore de Laforet" contains mercury (?) 60 grs.; sulphide of arsenic, 30 grs.; litharge, 30 grs., and starch, 30 grs. "Epiteine" is simply sulphite of calcium, and "Antibolbos" hypophosphite of soda. Pomades against baldness all contain cantharides and croton oil.

NO SUCH DISEASE AS PRURIGO.—Dr. Tom Robinson gives *(Jour. Cutaneous and Venereal Diseases)* his ideas on this so-called disease, as follows:

1. There is not such a disease as *prurigo.* 2. That all cases of itching skins have a recognized and discoverable cause. 3. That all the group of symptoms, which are known as prurigo, are the result of scratching, and are simply symptoms. 4. All scratched skins which have advanced to an elephantoid state, and which have set up enlargement of lymphatic glands, are beyond the reach of remedies or hope. 5. That the pruriginous skin of children has its origin in developing hair follicles, which progresses from birth to puberty, when it stops. 6. That excessive itching does not occur in those situations where the hair grows luxuriantly. 7. That what is known as winter prurigo is due to imprisoned hairs. 8. That an irritable state of the chin is always associated with an irritable state of the mucous and synovial membranes.

USE OF CASCARA SAGRADA.—Dr. Russell, writing to the *Coll. & Clin. Record,* gives the result of the action of the above drug in fifty cases, which were under his observation for a considerable time. The fluid extract was always used, with an initial dose of ♏ xx, t. d. He found it useful in forty-three cases out of the fifty, in all of which favorable cases the dose was gradually diminished, while in no case was it found necessary to increase the effective dose to produce an evacuation of the bowels. The writer notices that it is much more useful in chronic than in acute cases, and especially in older patients.

NEW TEST FOR MORPHINE.—We take the following from the *Med. Press and Circular:*—Add a few drops of concentrated sulphuric acid to a solution containing as little as 1-200th grain of morphine, together with a few drops of a solution of sulphate of sodium, heat in a porcelain capsule, and as soon as a white vapour of sulphuric acid forms, cool rapidly, when the mixture will become of a blue color, resembling syrup of violets. If the heating process be continued the liquid turns brown, and when allowed to cool, it turns of a bright red color on the addition of a few drops of water. A little more water turns the color to a pale green. If now an equal volume of chloroform be added and shaken, the chloroform becomes of a fine blue color.

OSMIC ACID IN SCIATICA.—Considerable success (*London Med. Rec.*) has followed the injection of osmic acid in the course of the affected nerve, not a few absolute cures having been reported as well

as many ameliorations. A one per cent. aqueous solution is used, of which about sixteen minims are injected, at first daily and then less frequently.

THE INTERNATIONAL MEDICAL CONGRESS will convene in Washington, on Monday, September 5th. Members intending to attend the Congress are requested to send their names in advance to the Hoffman House, New York, so that the committee can secure for them reduced hotel and railroad rates.

AMERICAN PUBLIC HEALTH ASSOCIATION.—The fifteenth annual meeting of this scientific body of men will be held in Memphis, November 8, 9, 10 and 11, 1887. The Executive Committee have selected the following topics for consideration: "The Pollution of Water Supplies," "The Disposal of Refuse Matter of Cities," "The Disposal of Refuse Matter of Villages, Summer Resorts, and Tenements," and "Animal Diseases Dangerous to Man."

TO STOP THE PAIN IN BURNS.—A writer to the *Rep. de Pharm.*, says he has succeeded in almost instantly arresting the pain in burns, by allowing seltzer water to flow slowly over the affected parts. He thinks the carbonic acid, and the cooling, combine to arrest the pain.

URTICARIA.—De Mussy gives *(L'Union Méd.)* the following formula for the above:

R—Pulv. jaborandi,
Ext. guaiacæ, ... gr. jss.
Lithiæ benzoat, ... gr. iij.
M. ft. pil.

BRITISH DIPLOMAS.—Dr. William Brown Thistle, of Stratford, Ont., has lately taken the L.R.C.P. London. Drs. R. C. Kirkpatrick, of Montreal, S. G. Parker, Toronto, J. D. Flagg, J. D. Balfour, D. G. Russell, H. C. Cunningham, T. A. Amos, have taken the triple qualification of L.R.C.P. and S. Ed. and L.F.P. & S., of Glasgow.

INFANTILE DIARRHEA.—It is said *(La France Médicale)* that Huyem has found that the green colored stools of infants with entero-colitis, is due to the presence of a microbe which secretes the green coloring material. The treatment recommended is, a dessertspoonful of a 2% solution of lactic acid after each nursing.

FOR SUMMER DIARRHEA:—

℞ Tinct. opii deodorat. . . . . gtt. vj.
Tinct. catechu . . . . . f ʒ jss.
Syr. rubi villosi
Syr. rhei aromat. . . āā f ʒ ii ss.
Aq. camphoræ . . . . . f ℥ j.

M. S.—A teaspoonful every hour or two, for a child under one year.—*A. S. Gerhard.*

FOR SCIATICA, Dr. Metcalf *(Jour. Am. Med. Assoc.)* says the following is very useful:

℞ Tinct. aconit. rad.
Tinct. colch. sem.
Tinct. belladon. . . . . āā ʒ j. M.

S.—Gtt. vi every 6 hours.

CHRONIC RHEUMATISM.—The following is a useful formula:—

℞ Liq. pot. arsenit. . . . . ʒ ss.
Potas. acetat. . . . . ʒ ij.
Vin. colchici rad. . . . . ʒ ij.
Ext. cimcifugæ fl. . . . . ʒ iij.
Ext. phytolacca fl. . . . . ʒ iss.
Aq. menth. pip. . . . . ℥ iij. M.

S.—℥ j every 4 hours.

HEBRA'S OINTMENT FOR FRECKLES:—

℞ Hydrarg. precipitat. albi . . gr. 75.
Bismuthi subnit. . . . . gr. 75.
Ung. glycerin. . . . . ʒ 5.
M. ft. ung.

S.—Apply every two or three days.—*Les Nouveaux Remèdes.*

AGARICIN IN NIGHT SWEATS OF PHTHISIS.—The following is a convenient formula *(Quarterly Bulletin)* for the above:

℞ Agaricini (Merck) . . . gr. x.
Atrop. sulph. . . . . gr. j.
Ae. sulph. aromat. . . . . ♏ 1200.
Dissolve and filter.

S.—♏ x in syrup or simple elixir.

TO DISGUISE THE ODOR OF IODOFORM.—Dr. Graydon *(Med. News)* says the following will be found a satisfactory means of disguising the odor of the above useful, but disagreeable drug:

℞.—Balsam, canadensis,
Iodoformi, ... āā ℥j.
Vaseline, ... ʒvi.—S.

FOR EAR-ACHE.—The *Med. Specialist* gives the following for ear-ache :—

R—Morph. mur., ... gr. v.
Atropiæ sulph., ... gr. j.
Ol. oliv., ... ʒ j.
Glycerin. (neutral), . . . ʒ jss.—M.

SIG.—3 to 5 drops into ear, every hour, till pain ceases. Plug with cotton-wool after each application.

DR. CARL. FRIEDLANDER, the celebrated pathologist, died of phthisis, May 13th. His name will be remembered as the discoverer of the pneumococcus, the supposed specific bacillus of pneumonia, the nature of which disease has, since his discovery, received much attention from investigators in all parts of the world.

FORMULA for the administration of iodoform and creasote in phthisis. In *Nouveaux Remèdes*, Huchord gives the following as a convenient formula for the above drugs :—

R—Creasote,
Iodoform,
Benzoin pulv., ... āā gr. ¾.
Balsam tolu, ... ℥ ¾.
For one sugar-coated pill.
SIG.—2 to 4 pills daily.

SOOTHING MIXTURE FOR CONSUMPTION.—Dr. J. B. Johnson, in *Med. and Surg. Rep.*, speaks highly of the following :—

R—Syrup liquorice root, . . . ʒ j.
Aromatic syrup rhubarb, . . ʒ ss.
Fluid extract opium, . . ʒ j.
Liquor ammon. acetat., . . ʒ v.—M.

SIG.—Shake well. Dose.—A tablespoonful every two or three hours.

Books and Pamphlets.

A PRACTICAL TREATISE ON RENAL DISEASES AND URINARY ANALYSIS. By William Henry Porter, M.D., Prof. of Clinical Medicine and Pathology in the New York Post-Graduate Medical School and Hospital; Curator to the Presbyterian Hospital. One vol. 360 pages, 100 illustrations. New York: Wm. Wood & Co.

The author of this work, unlike many of the tribe of modern book-makers, has written because he had something, a good deal indeed, of his own, worth reading, to submit to the profession. The 1st part is devoted to the "Diseases of the Kidneys," and the 2nd, which is of equal extent, treats of "Urinary Analysis," by chemicals and microscopic research. The reader's interest will not slacken in the perusal. Dr. Porter is evidently not only at home in his subject, but he is also able to draw the reader there, and to entertain him pleasingly and profitably. The illustrations, numbering 100, are much better executed than those presented in many of the medical works at present issued by American publishers; they really do illustrate the text, instead of rendering it more obscure, as some of the perpetrations now met with, certainly cannot fail to do. Wm. Wood & Co. deserve high commendation for the respectable aspect of this book.

THE CURABILITY OF INSANITY, and the Individualized Treatment of the Insane, by John S. Butler, M.D., Hartford, late Physician and Superintendent of the Connecticut Retreat for the Insane, etc., etc., 1887. New York: G. P. Putnam's Sons. Toronto: Williamson & Co. Pp. 59.

An interesting little book. The writer makes many strong points in the individualized treatment of insanity, which he holds is as much called for as in the treatment of acute forms of other physical disease. The book is full of illustration, and will repay a perusal to those interested in the treatment of insanity.

FACTS AND FICTIONS OF MENTAL HEALING. By Charles M. Barrows, author of "Bread Pills," etc., 1887. Boston: Carter & Karrick. Toronto: Hart & Co. Pp. 248.

This is the first volume we have seen devoted to the instruction of the uninitiated into the mysteries of what is ordinarily called mind cure. It reads in part like the tales of a magician, and in part like the ordinary jargon of spiritualistic quackery of the nineteenth century. The author seriously quotes from letters, showing how scarlet fever was instantly cured, by the prayers of the father of the affected child; how a *dyspepsia* of many years' standing, was suddenly cured by humbugging the patient, and gives many other even more improbable cures by the mental method. If we had space we should like to give a few of the instructions from "leading authorities," in mental healing for the cure of disease, but "*le jeu ne vant pas la chandelle.*"

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OBSTRUCTED URINARY OUTFLOW.*

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MR. PRESIDENT AND GENTLEMEN,—It is with somewhat mingled feelings that I stand up before this Association to read and perhaps provoke discussion on some surgical topic. I feel pleasure, I confess, at the honor of being asked to thus occupy your time for a short space, but the pleasure is modified by the thought that one more fitted to do this—one who had been asked and had accepted the work—has, ere the time came, been removed by death. I need hardly say I refer to the late Dr. Fulton, my predecessor in the Chair of Surgery in Trinity Medical School. It is not necessary for me, I know, to bear witness to the able manner in which this task would have been done by him. His experience and judgment in surgical cases had been steadily ripening by constant observation and study. But last year he spent a large portion of his time among the hospitals of Britain and the Continent. This, combined with his peculiar aptitude for, and his long experience in teaching, makes his loss as a professor of the science and art of surgery a marked one. As his substitute at a rather late date, when my hands were to be fully occupied in the preparation of a course of lectures for the coming winter session, I feel I can confidently claim the special indulgence of this Association.

The surgical field is now so wide, and yet is ever widening, that it is not an easy matter to choose from its ample fold a particular subject of moderate dimensions that it is interesting and profitable to discuss. I have ventured to bring the subject of obstructed urinary outflow before you, because it has several claims to our attention. It is a common affection in this country. What is common ought to come home to us all, ought to interest us all, seeing that it is not limited to the hospital surgeon, whose opportunities are larger, nor has it with us been marked out as a preserve requiring a special keeper. Rather it falls to the lot of every general practitioner. It frequently requires to be dealt with at once. Its urgency is, or may be, so great as to leave but scant time for consultation with books or even with a fellow-practitioner—the over-distended bladder prays for relief, and we are looked to for that relief as speedily as possibly.

Among all the causes of obstruction to the outflow from the bladder, two are specially prominent, and are most frequently the offending cause. They are stricture of the urethra and enlargement of the prostate.

Stricture as a Cause.—If we believe the statements of our patients as to their ailments, stricture of the urethra would be a very common affection; for many patients consult the surgeon, and when asked the question, What do you complain of? reply at once, I am suffering from a stricture, or a touch of stricture; but a little further questioning and examination shows no indication of such, the reason being that any discomforts in the act of making water, however trifling and temporary, is to their minds indicative of this complaint. I shall endeavour to regard stricture in its most practical, if not in its most exhaustive light as a cause of obstructed urinary outflow. There are three classes of stricture. The inflammatory group, which some surgeons decline to consider as a form of stricture at all, preferring to restrict the term stricture to the organic form alone. Yet, this inflammatory swelling of the urethral canal is an important factor, under two conditions, in producing more or less complete obstruction to the passage of urine. We meet with it in cases of acute gonorrhœa. The patient, a young man with his first attack, not estimating the importance of care sufficiently, disregarding the advice given him by his attendant surgeon, indulges freely in alcoholic liquors, at the same time unduly over-exerting and exposing himself to cold and damp, and

*Read before the Canadian Medical Association, Hamilton, Sept. 1st, 1887.

even, perhaps, indulging in sexual intercourse, finds that he is suddenly unable to pass water at all. His outflow is obstructed—inflammatory swelling has closed his urethral canal. The surgeon is called upon for relief. The diagnosis is so plain that any surgeon, I think, after trying the effect of a warm hip-bath for some time and not obtaining relief, would not temporize any longer, but pass a soft, flexible catheter and relieve this retention.

In the other class are those who, having a permanent organic structure by much the same line of conduct, induce congestion of the urethra at the strictured part, and the small inconvenience of the permanent stricture is all at once aggravated into a more or less complete retention of urine. Here also the catheter is to be used.

Spasmodic stricture is the second group. Now and then the calibre of the urethra is narrowed by the contraction of the muscular fibres of the canal. It is met with in the deeper parts, for there the muscular bands are the most numerous. When pure, that is to say, not associated with inflammation nor a concomitant of organic stricture, it is due to some reflex irritation, temporary, as in cases of operation on the lower end of the bowel or verge of the anus, and in fractures of the femur; now and then more permanent, and then liable to be mistaken for real stricture, in those cases in which true organic stricture exists near the meatus, and as a result a spasmodic closure occurs by reflex irritation of the perineal muscles in the neighborhood of the bulb. Chloroform by causing relaxation of such strictures, indicates their origin. Should they produce obstruction to the urinary outflow, relief is easily obtained by the passage of a fairly large-sized catheter; for while the spasms may be an impediment to the outflow it ought to be no hindrance to the entrance of the instrument.

But the most interesting and practical stricture is the true organic stricture. Bearing in mind that, at rest, the walls of the urethra, by elastic and muscular contractibility are drawn closely together, that this position is maintained until the outflowing stream of urine separates them, or when an instrument is passed down the canal, it is easy to understand how a deposit of lymph round the canal of the urethra, at some point in the submucus and vascular tissue, and this deposit subsequently becoming rigid and contracted causes the natural distensibility of the canal over a limited area to be lost. The causes producing this deposit and its resultant stricture are gonorrhœa or some injury to the perineum, implicating perhaps the urethra directly, as falls, kicks or blows. Starting with a history of one or other of these causes to help us, we base our diagnosis on (1) smallness of the stream, depending on the narrowed state of the canal. I have often fruitlessly tried to get a clear answer from patients as to size of their stream. They can say if it is forked or twisted, which has comparatively little value, but they do not seem to notice the gradual diminution in the size, so I am in the habit of asking them to make water before me, so as to judge for myself. The splitting or twisting of the stream may depend on a narrowed meatus where no real stricture is present, and is not to be relied on as of much value. (2) Frequency of making water is nearly always present in cases where the stricture has existed for some time, and even in comparatively recent cases. (3) Pain, I find, a very varying and unreliable symptom, whether it be at the point of contraction or above the pubis—in this latter situation it depends on sympathetic cystitis. The whole of these symptoms taken together strongly point in the direction of stricture. Next, (4) the physical examination by the passage of a fairly large-sized catheter, No. 8 or 9, tells quickly if an obstruction exists, and also the exact site of such obstruction. As regards the endoscope as an aid in the physical diagnosis of structure I have no experience, but I think it is not likely to come into very general use at present, nor do I think the cases in which it would be really serviceable to be many. The presence of stricture being diagnosed, and its site made out, the next question is how to meet and abolish its being any obstruction to urinary outflow. This, in its entirety, is a very large question. It is not my intention to try and grapple with it fully. I would rather direct attention to one method that, I think, is worthy of being tried in many cases—I mean gradual interrupted dilatation, procured by the passage of sounds or bougies through the stricture, beginning at that size which will just pass through, and at subsequent times increasing the size of the instrument until the full calibre is reached without wounding the urethra. When passing instruments on the urethral canal, I think we would do well to bear in mind Sir Henry Thompson's simple axioms, viz.: That the

use of instruments down the sinuous passage of the urethra with its delicate vascular walls lying in contact with each other is an evil—a small one, or a great one, according to the manner in which they are employed—and should not be used unless there is good reason to believe there is a greater evil present, which they may mitigate or cure; further, that as the passage of an instrument, even on a healthy urethra, is a source of irritation, no one should pass an instrument on another, until he has passed one on himself, for it is obvious that the amount of irritation will depend greatly on the manner in which it is passed, and also on the kind of instrument used. One object should be to effect gradual dilatation with the least possible irritation. With this purpose in view, what instrument or bougie should we choose? I must confess I have modified my views somewhat. In my student days I saw numerous cases of stricture in the surgical wards of the Edinburgh Infirmary, and Sir Joseph Lister—whom I specially followed—was a strong advocate of the rigid instrument. Of these, he had three different sets; one like the ordinary silver catheter, one short and straight set, and one which bears his name—the steel, conical bougie. Seldom did he, with one or other of these kinds, fail to dilate the stricture, however contracted or peculiar. Strongly prejudiced in favor of the rigid instrument at the outset, experience has compelled me to admit that, in many cases, much may be done by flexible bougies; further, I think that in all cases they should be given a trial first. As to the particular pattern of flexible instrument that is most useful, I cannot speak positively. I do not know any general rule that should govern, each case must be judged separately on its merits, the quality and site of the stricture being considered. At one time the English pattern, with its special quality, viz.: that when heated in warm water, and given any required curve, then plunged into cold water, that curve will be maintained—will be useful. On other cases it is easier to pass the French pattern, which is extremely flexible, and has a tapering point, with, or without a bulbous end. Probably, with the flexible ones we are more likely to succeed in strictures of recent origin that have not been irritated much, and in which the amount of inflammatory induration is not great nor firm. Failing with the flexible ones, I next try the rigid instruments—either the catheter pattern, or the conical, silver-plated steel instruments—using these last with great gentleness, remembering that I possess in them a powerful factor for good, when properly and discreetly used, but an equally potent factor for mischief, if carelessly used or abused. I find I need myself to continually remember this, for one's patience is at times severely taxed in difficult cases, due either to extreme narrowness, or some complication of false passages or other like obstruction—cases where after trying methodically, patiently, and gently, we find the instruments decline to enter, then the temptation is to use just a little force in what we might call the anatomical urethra, and with disastrous results.

How much should we endeavor to do at one time? As a rule, I think that as soon as we reach a size that is firmly grasped we have done enough for one day, and yet cases not infrequently report to us at the hospital that surgeons try and do pass instruments day after day for a lengthened period.

As to the lubricant to be used, I think few surgeons in the present day would use one that does not contain a germicide or antiseptic in some form, for the evidence is so greatly in favor of the view that decomposition of urine is due, in all cases, to the introduction of microscopic organisms from without, and that these organisms find their way into the bladder frequently by instruments introduced by the surgeon. If introduced, the consequences of putrefaction extending to the kidney are so grave that the surgeon who neglects to use them incurs a heavy responsibility.

I have tried cocaine as a local sedative to overcome the painful and disagreeable sensation during the passage of instruments, and also to thereby lessen the instinctive muscular spasm so produced. I find it acts very satisfactorily. Half a drachm of a four per cent. solution injected into the urethra, and held there some minutes, unquestionably facilitates the introduction of instruments. In one case, I am sure, it enabled me to pass a small instrument which I am doubtful if I could have done without using it. In another case it reduced much the fever following the use of instruments. In this case the stricture was the result of injury to the perineum by the patient's falling on the wheel of a carriage. An endeavor was made by a surgeon to pass instruments, but without success. Three or four days afterwards he

came under my care, and with cocaine I passed No. 2.5 conical steel sound, and finding that he seemed to suffer very little I passed the rest up to No. 12.

After the first attempt his temperature at night rose to 105°, and he had great general discomfort. After the dilatation with cocaine anaesthesia, his temperature rose only to 101-3°, and the general discomfort was slight.

Strictures complicated with fistula in perineo I have also successfully dilated and temporarily cured. Cases which are due to loss of tissue, and constant infiammatory action over a considerable area of perineum, are not usually the most promising for simple dilatation, but frequently require some operative interference, urethrotomy, or generally external perineal section.

I said temporarily cured, because I think most surgeons find that, no matter in what manner the strictures may have been dealt with in order to effect a cure, such a state of full dilatation does not remain. Slowly, but certainly, the strictured part contracts and requires to be kept patent probably for the rest of the patient's life.

I have advocated in this paper but one method of treating strictures, and I have done so purposely. I believe that to the great bulk of practitioners in Canada this mode of treatment is most available, most simple, most safe; and in many cases of urethral stricture, especially those in the neighborhood of the bulb, I feel confidence in advising a trial of interrupted gradual dilatation. Again, the limits of such a paper as this forbids entering into the merits and demerits of all the ways and modes of treatment. I am aware that many may prefer to combine dilatation and internal urethrotomy, especially in tough undilatable strictures in anterior portion, or in those cases in which, owing to grave constitutional symptoms, which may occur as a result of dilatation compel it to be thus modified, or in cases where contractibility or resilience is strongly marked, and all our efforts at dilatation are neutralized by this peculiarity.

I am inclined to believe that internal urethrotomy is not yet undertaken by many, because they fear the possibility in unpractised hands of very serious consequences; for it cannot be denied that incision of the urethra is not infrequently followed by special dangers, chief among which are hemorrhage, urinary fever, extravasation, and abscess, as well as blood poisoning in all forms of pyemia, septicemia, phlebitis, embolism, and thrombosis. Others, again, neglect to give a trial to the simpler and safer method, preferring to incise each and every case of organic structure of the urethra, quite independent of site, character, or anything else. I do think that though I am privileged to open the discussion, and in doing so strongly advocate dilatation, our good president will not object to any member favoring us with his view on urethrotomy, internal or external; dilatation, gradual, or interrupted, or continuous; by splitting rapidly, by electrolysis or any other recognized method.

The second cause of obstructed urinary outflow that I propose shortly to review is hypertrophy or enlargement of the prostate—that disease incidental to advanced age, the morbid anatomy of which is sufficiently precise, but the etiology of which is unknown, affecting as it does all sorts and conditions of men, from the judge on the bench to the coachman on the box.

It is important to make the diagnosis as early in this case as possible, and to relieve by mechanical means at an early period also. I do not think this is sufficiently appreciated. It is not usually done as early as it might be. Let me give a typical case of delay in the use of the catheter:

C. S. G., aged 68, a particularly well made, healthy-looking man, consulted me for a pain in the eleventh interspace on left side, not far from the angle of ribs, and dribbling of water into his bed at night, generally between the hours of 5 and 6 a.m.; now and then in the day time into his trousers as well. Questioning revealed that during the day the calls to micturate were infrequent, but that he made water first thing on rising, after partially dressing again, and just after he was dressed, or three times in an hour, and a fair amount passed each time. The stream was normal in calibre, but not well projected, and towards the end dribbled a good deal. Chemical and miscroscopic examination of urine revealed nothing except that urine was rather light colored and of low specific gravity. He had quite distinct fulness and dulness in the hypogastric region; advised to have a catheter passed to relieve the bladder, but the idea was very distasteful to him, and he declined to allow its use, preferring to go to England and seek advice there. He first of all consulted a

homœopathist; he said he had many such cases, but six weeks' trial of the remedies of that school failed to in the least degree benefit his case. Another medical man said, "I'll take the bow window off you," evidently thinking adipose tissue was the cause of the enlargement in the hypogastric region and not over-distention of the bladder. Another surgeon told him he had water in his bladder, and that he might require the use of a catheter. It was not until on board ship that he was persuaded by the ship's surgeon to allow a catheter to be passed, and though he went through a sharp attack of cystitis afterwards, and passed bloody urine even as dark as porter at first, he is now in good health, and for some years has passed water on every occasion only by the use of the catheter.

This condition of enlargement is to be suspected when the stream of urine becomes dribbling, and there is an obvious difficulty in emptying the bladder. Micturition especially frequent in the night or early morning, for it is after some hours of sleep or by taking of stimulating fluids freely that the frequent attempts to empty the bladder are made—perhaps a little pain before the act and none afterwards; no alteration in the character of the urine; no passing of blood. The diagnosis is completed by making the patient pass water before us. Then passing a catheter to ascertain how far the enlargement is a barrier to the exit of the urine for the quantity left behind, or residual urine at each act, determines the future treatment. One caution is necessary—it is often wise to ascertain a second time, by this passing of the urine, *ante oculo*, for the nervousness of the patient may produce a temporary inability to thoroughly micturate, and this gives us a false idea of his powers. If these symptoms are neglected or overlooked inconvenience follows, depending on over-distention of the bladder, and later on, from the same cause, cystitis, dilated bladder and ureters, and important renal changes.

Mere size of the gland is not of much assistance in diagnosis, for so long as the prostatic urethra is not encroached upon, the gland may assume considerable proportions by enlargement of the lateral lobes; while if the so-called middle lobe be only slightly enlarged, difficulty in micturition is sure to result, even if the enlargement is so small as to be undetectable by the surgeon per rectum.

It is useful to feel the gland per rectum in all cases to ascertain its size and general condition, which can easily be made out by the finger above and on each side; but I do not think anything is to be gained by introducing short-beaked metal sounds down the urethra and endeavouring to measure the amount of enlargement, and there is a decided objection to their use. Our diagnosis of hypertrophy being clearly made out, and also that this is acting as obstruction to urinary overflow, it may then be proper to direct and teach the patient to use an instrument at least once in the twenty-four hours. Catheterism being necessary, we select that form that will produce the least irritation. Trying, perhaps, first of all, a soft rubber catheter, Jacques' pattern, these sometimes slide in easily, sometimes they won't go in at all and no amount of persuasion or skill with instruments can make them. Or an English gum elastic, or French, olive shaped, may be preferred. Yet I think, of all the soft or flexible catheters, the one most likely to be the most serviceable and to pass the easiest, is the French catheter Coudèe. This is especially easy to pass if you keep the beak upwards and allow the catheter to ride into the bladder. If this fails withdraw it about an inch and rotate it on its axis, so that the beak points to the right—if you fail, similarly to the left, and see if it will not slip on into the bladder, for at times the passage is circuitous. Silver catheters are to be used if the soft ones fail, and the introduction of the left forefinger into the bowel is often of service by pressing the point of the catheter forwards.

That this catheterism is necessary is very plain to the surgeon for relief of the more or less complete retention, but should it unhappily be the starting point of serious and perhaps fatal illness, it is not easy to convince the friends of the patient that it is not because the catheter was used, but that it was not used early enough, that the illness is so grave.

I have seen a metaphorical illustration of this possibility by Mr. B. Browne, which I consider very apt: "An elderly man requiring catheterism for a partial or complete prostatic retention of urine may be looked upon as a blind traveller unconsciously approaching the brink of a precipice, and his surgeon may be compared to his friend, who, aware of the danger, hastens to [illegible]ance

The friend must interfere or else the man is lost; but if he rush unskilfully to his aid he may cause him to stumble and so actually hasten his end, although by a very brief period of time; or the man may already have lost his equilibrium, the most skilful aid is unavailing and he falls, and in failing may drag his would-be saviour with him." In other words, the on-lookers, ignorant of the danger, may attribute the loss of the patient to the surgeon and his cathether, and the surgeon's credit, dear to him as his life, be gone. Therefore with regard to prostatic catheterism it is incumbent on us to act from the very outset cautiously and judiciously, that no one may have occasion to reproach us.

What is it, it may well be asked, that makes catheterism in these cases so fraught with danger at times. The reason is that it may be followed by fever of varying intensity. In one case slight, in another serious or even fatal. This causes us to further inquire: What is the cause of this fever that may be so serious? so that we may try and prevent it or lessen its severity. The starting point of irritation being the catheter, some have ascribed it to septic invasion of the kidney, due to the introduction from without of septic matter on the instrument. That this can and does happen I firmly believe. I like to carry it always in mind, and by my actions eliminate it as a cause, but that it is frequently a cause, I do not think.

Of course, if the urethra be torn or injured by the introduction of instrument, absorption of septic products might, and probably would, result in fever, just as a breach of surface anywhere in the body; but we know that this fever may follow the most skilful catheterism conducted with the most strict antiseptic precautions. The theory advanced, that this is due to absorption of urine, through the injured mucous membrane of the urethra, is not tenable either, except in the rarest of instances.

The most probable explanation is, that the fever is the result of shock to the sensitive excretory apparatus of the kidney through the nervous system. That the connection between the genito-urinary organs, and the cerebro-spinal and sympathetic nervous systems is extremely close, can readily be illustrated in cases where the shock of an instrument passed is sufficient to cause complete suppression of urine, even for 24 hours.

In many cases the shock to the kidneys is withstood, the resulting constitutional disturbance overcome, and the patient after a time recovers. In all cases, probably, this is the result where the kidneys are healthy at the time of catheterism; this is much more likely to be their state when the obstruction to the outflow has not existed very long. Now, I do not know how we can, by examination of the urine, tell what the exact state of the kidneys is, whether they are sufficiently healthy to bear the shock, so the lesson is brought home very clearly to us, "Use the catheter early in the disease."

I am aware some cases of enlarged prostate only suffer from occasional more or less complete retention, and therefore require only the occasional use of the catheter. The use of instruments will, sooner or later, be demanded in all likelihood by some strong emotion or sudden congestion, or other similar cause, rendering the bladder unable to expel its contents. But these cases are usually compelled in the end, as are the great majority of cases of enlarged prostate, to regularly use the catheter, and they require to be taught to pass it for themselves once, twice, or more frequently per day, and not to trust to the surgeon's visits.

We plan, then, our measures to reduce the shock of passing the catheter, occasional or habitual, as the case may be, to a minimum, and to do that I think we ought (1) To use a soft, flexible catheter, preferably the highly polished silken-webbed gum catheter of the Coudèe pattern. (2) To use an antiseptic lubricant, either carbolic acid and oil, or carbolic acid and vaseline, or Lund's oil, or some like preparation. (3) See that the catheter used by the patient is at all times kept most scrupulously clean. (4) Use some sedative to soothe the nervous system, either a single dose of morphia shortly before the passage of the instrument, or quinine and morphia administered in several doses for some days before. As a local sedative, cocaine, to me, does not seem so applicable as in cases of stricture, for it is to the deeper parts of the urethra chiefly that we wish it to be applied, and this cannot be done without using a urethral instrument.

One other point I would mention in these cases of prostatic disease. It is that the bladder, after the habitual use of the catheter, requires to be washed out. Urine in the later stages may accumulate in pouches, and the catheter may not be able to evacuate it entirely; it decomposes, and the unpleasant effects of this are best met by thorough irrigation of the viscus. In doing this, we should be careful not to allow the entrance of air into the bladder, nor to use any force with the injection. This is easily and conveniently managed by attaching to the catheter, already passed, a rubber injecting bottle, of the capacity of three or four ounces, by means of a piece of tubing, filling

it completely, first of all, with the fluid to be used, warmed to the temperature of the body. The fluid may be a solution of borax and glycerine, or Barff's boro glyceride gr. xij. ad ℥i., or Hg. Cl_2. ½gr. to ℥i., or some other such. Inject not more than two ounces at a time, allowing it to run off, and then repeating the process as many times as desired.

One caution, too, in those cases where, by slow accumulation, there has been great distension of the bladder and a catheter is to be used, it is not wise to empty the bladder completely at one time, for fatal consequences even have followed such a course.

Lastly, those advanced cases where life is in danger, or at any rate existence is rendered miserable, due to the frequent calls for catheterism day and night, I do not propose to discuss. My friend Dr. Groves, of Fergus, at the last meeting of the Ontario Medical Association, favored us with the report of cases in which he had performed perineal incision, followed by very marked benefit. This, I believe, to be the best means of obtaining the requisite drainage, and superior to any supra pubic or rectal operation.

DOMINION MEDICAL ASSOCIATION. ABSTRACT OF THE PRESIDENT'S ADDRESS.

BY J. E. GRAHAM, M.D., TORONTO.

After thanking the Association for the honor done him, the President made some remarks upon the importance of Medical Associations, and quoted as follows from the report of the Committee on Organization, and presented at the recent meeting of the American Medical Association in Chicago: "The three objects of paramount importance to be accomplished by medical organization, are (1) The promotion of direct personal and social intercourse between physicians, by which mutual respect, personal friendship, and unity of sentiment are greatly promoted. (2) The more rapid diffusion of medical knowledge—scientific and practical—and (3) The developing, unifying, concentrating, and giving efficient practical expression of the sentiments, wishes, and policy of the profession, concerning its educational, legal, and sanitary welfare, and the relations of the latter to the community as a whole."

He then went on to speak of the great necessity for *unity* in the profession, and regretted that in Canada we are not in this respect on a par with other countries. Referring to specialties, the speaker believed that specialism would continue to grow and that it should be provided for. He then spoke of the losses the professsion had sustained by the death of prominent members during the past year, and this led him to the main text of his address, viz., "Overwork and its consequences, as exhibited in the lives of our medical men," upon which he spoke as follows:—

In these days of intense activity, we find frequent evidences of the effects of over-work in the members of the various professions and callings. In each profession, however, there are certain peculiarities, or peculiar methods of work, which are specially injurious to the human system. Of these, so far as they affect the medical profession, we wish to speak. The victims of over-work in our profession may be divided into three or four classes.

The first class may be illustrated by the following example:

A young physician enters into city practice, and, in his eagerness to succeed rapidly, engages in lodge and other contract practice. In this way he assumes at once work and responsibilities which ought to belong to riper years. Often, too, he acquires new patients by a spirit aggressive, and sometimes offensive, to his seniors. If he is a conscientious man he will become, more or less, intensely worried about his patients. He will constantly meet with cases entirely new to him, and will be in doubt as to the correct treatment to pursue. He is, at the same time, under the disadvantage of being considered a young man, and they who contract for the services of a physician are generally the most exacting and the most unreasonable. They often make remarks which are exceedingly galling to a sensitive nature. With this kind of practice there is always a good deal of night work. The patients are usually careless whether they send in the day or night so long as they have nothing extra to pay. If the young physician, as is often the case, falls into a large midwifery practice at the same time, his lot of drudgery—I was almost going to say slavery—is complete. For a few years he does not feel the strain, but sooner or later his constitution gives way. He is frequently subject to severe headache and palpitation of the heart. Symptoms of dyspepsia show themselves. He finds that he cannot

endure night work so well, and feels a general want of strength. If he is wise he will either give up contract practice, or else take a long rest.

A second class of cases are made up of those who early acquire a large country practice. The instances of premature decay are not so frequent in this class, unless the person becomes addicted to stimulants. Although there may be greater fatigue connected with country practice, there is the compensating advantages of pure air and less worry, as the number of patients under treatment is necessarily fewer and expenses of living are less. Many, however, have in the meantime assumed the responsibility of supporting a family, and may not be in a position to give up any of their work. Sometimes they resort to stimulants. This pernicious practice can only have one result, sooner or later—utter and irretrievable ruin. In other cases, the physician works bravely on and is suddenly cut of by a pneumonia or by a typhoid fever, or some other illness, which could easily have been withstood if the system had been in a sound and normal condition at the commencement.

The third class in which we hear of the saddest effects of overwork is composed of those who settle in a large city, and who wish to assume the foremost positions as consulting physicians and surgeons, and to become eminent as teachers or authors.

A young man of this character, with little means, settles in a large city. He sets before him the following tasks : (1) He must make a living from the first. To do this he probably undertakes to teach students in grinding or quiz classes. This, when largely engaged in is exhaustive work. He also frequently does the night work of an elder practitioner, and loses as much rest as one in large practice. (2) He must acquire a reputation as a practitioner. For this purpose he becomes connected with as many hospitals and dispensaries as possible, spending several hours each day in a close and unhealthy atmosphere. (3) He must acquire a reputation as a teacher. For this end he, if possible, becomes connected with a Medical School, where he is expected by the older heads to do an enormous amount of work for little or no pay. (4) His tastes and ambition lead him to become an original investigator of disease, and he has the laudable design of adding to our stock of medical knowledge. To do this he pursues some line of clinical or pathological investigation—a work which may be exceedingly interesting but which must be carried on largely at night, thus robbing the enthusiast of hours which should be devoted to sleep. Then he desires a competence for himself and family. To some the fatal idea comes of becoming wealthy. As this cannot be be done in the slow way of ordinary practice, they engage in speculation, and we all know how fortunate doctors are when they enter that business. There are a few of extraordinary constitution who can bear up for many years against such a heavy strain, but they are few indeed. From constant and unremitting work symptoms of brain tire show themselves.

The physician complains of frequent headaches, becomes irritable, suffers from insomnia, and finds he is unable to do the usual amount of work, his memory fails, especially in details ; bodily weakness, indigestion, inactivity of the liver appear to warn him of his doom in the near future unless he changes his mode of life. Finding himself unable to work he takes a short holiday, feels much improved, returns to labor in the same way as before. Organic disease may now become developed. The heart becomes weak and irregular. Atheroma of the arteries and consequent apoplexy may lay him aside or may end his career. Bright's disease may show itself. If none of these organic diseases present themselves, the unfortunate may be cut off by some acute disease. Instances are not rare of degeneration of the nerve centres, with consequent melancholia and suicidal mania. This is not a fancy sketch, but one which could be substantiated by many instances. I will mention but one, that of the late Dr. Golding Bird. Dr. Routh, in his book on overwork, gives the following account of an interview with that distinguished man:—"I well remember a conversation I had with the late Dr. Golding Bird, a few weeks before his death. He was then in the zenith of his popularity, and recognized by all as one of the ablest of our London physicians. I called upon him one morning with a relative to consult him. Several other medical preceded me. His rooms were full, and I had to wait three hours ere I could obtain admission to his study and consult about the case. I congratulated him on his success in practice. 'Yes,' he said to me, 'you are right ; but I wish, nevertheless, to make your remark a text for a little parting advice. You see me at a little over forty in full

practice, my rooms full, and making my several thousands per annum,' (I think he said seven), 'and if I die to-morrow I do not leave as many hundreds to my family. All this I have done by sheer perseverance, unceasing hard work, and no holiday. But I am to-day a wreck. I have fatal disease of the heart, the result of anxiety and hard work. I know I cannot live many months, and my parting words of advice to you are these, never mind at what loss, take your six weeks' holiday. It may delay your success, but it will ensure its development. Otherwise you will find yourself at my age a prosperous practitioner, but a dying old man.' Six months after this conversation he had put off this earthly tabernacle."

It is my opinion that in such cases it is not the scientific labor which is the cause of trouble, but it is the worry, anxiety and fatigue of family practice, in addition to the scientific work. We all know from personal experience how exhausting it is to visit, day after day, upon a serious case of illness, especially if the patient is a near friend, or one of distinguished position in society. The amount of vital capital lost in these cases cannot be estimated. It is a singular fact that the large majority of cases of overwork occur among consulting physicians. Surgeons and specialists do not suffer to the same extent. The reason of this is not far to seek. The amount of brain work done by the physician, as a general rule, is very much greater than that done by the surgeon or specialist. The work of the latter, in most cases, is largely of a mechanical nature, and a great portion of their time is spent in manipulation. It is otherwise with the physician. Let us for a moment follow him in his every-day work. He must first attend to his correspondence This is usually no slight task, especially if he answers all the letters sent by brother practitioners throughout the country asking for advice in the treatment of certain detailed cases. I hope you will pardon the digression while I make a few remarks on this point. Very often, in fact in the majority of cases, these letters of advice are sent and an answer expected without fee. To read the detailed history of a case, and to give an answer of any value, takes up the greater part of an hour, and incurs quite as much labor as any other consultation. A specialist in Toronto, who is very conscientious in answering these letters, has informed me that the task frequently requires him to remain at his desk until after midnight. The late Dr. Darwin Hudson, of New York, when I was last there, complained bitterly of the same difficulty. So much labor ought not to be imposed without remuneration. In case the patient is poor and unable to pay, the consultant or specialist would always be glad to be of any assistance without any reward. In many instances, however, we believe the patients are well able to pay, and the attending physician need only state his intention of consulting by letter, and ask for the fee to have his wishes acceeded to.

We will now return to our subject. After the physician has finished his correspondence he is ready to receive patients. Together with a number of minor cases he may have two or three of difficult diagnosis, which may bring into exercise all his resources. He will write a detailed history of each case and, perhaps, afterwards write his opinion and treatment in a letter to the attending physician. When he has finished a morning's work of this kind he is frequently so exhausted as to wish for the afternoon to rest. But he must then go to the hospital and, perhaps, for one or two hours he examines and tries to make clear to a class of students cases quite as difficult as those of the morning. He then visits his private patients. (On this continent we have yet very few purely consulting physicians.) This may occupy his time until six or seven o'clock. After dinner he works at his lectures or other literary matter, and is at the same time harassed by numberless interruptions until nearly midnight. Then he may, like all medical men, be called up at night, or, if allowed to sleep, wakes up perhaps tired to continue his ceaseless toil. Is it any wonder that so many break down under such a strain?

The development of specialties has also added to the work of the physician. He cannot act simply as a distributing centre, sending one patient to this specialist and another to that; but he must learn to diagnose and treat many local diseases himself. This entails upon him the necessity of acquiring a knowledge of most of the specialties; and now that familiarity with bacteriology is added as an almost necessary accomplishment, the field is too vast to contemplate.

Now what are the lessons to be learned from all this?

1. That the rapid acquirement of a large and lucrative practice is often a great misfortune. It subjects the physician to the enmity of his older colleagues, often with and often without reason. It imposes burdens under which many fall, and it robs him of a happy and useful old age.

2. In the case of those who are ambitious to acquire professional favor for scientific work, the lesson is to avoid overwork. One ought not to try to become a noted physician and a rich man at the same time. It is a rare thing for a physician to amass a fortune, too rare to make it worth one's while to attempt it. A very important lesson is to notice the first admonition of a general breakdown, and to act upon the warning given. One of the best remedies is a prolonged holiday. This serves the purpose of giving the mind a complete rest. A long holiday is but of temporary benefit; the work must be cut down at home. Eight hours' sound sleep must be had at any cost. If the rest is broken by night calls it must be made up in the morning. Some part of each day should be devoted to recreation. These are difficult rules to follow out in practice, but they are quite possible when a determined stand is taken. Those who habitually overwork must remember that they are thus defeating the very object of their ambition. In the medical profession the best work should be done between forty-five and fifty-five. The late Dr. Flint did not issue his celebrated work on "Practice of Medicine" until he was over fifty. We know from observation that medical men in health are at their best during those years. This being the case, it should be the aim of an ambitious physician, above all things, to maintain his health and vigour, until he can reap the fruit of his earlier labor. The most satisfactory, the most lasting, and the best work is done by those who are careful not to overtax themselves, but who so arrange their business as to take that recreation which the body so much needs.

I would not close this address without referring to the opposite condition: the spirit of apathy and inactivity which blights many physicians' lives. It is far better to live an active life of usefulness, even if one should be the sooner cut off, than to pass through this world as a miserable drone, of little use either to the family or community.

Our active professional and business men, those who shape our destinies as a nation, frequently exhibit one trait of character which might almost be considered a failing, viz., the expectation of immediate results from their labor. This is particularly noticeable in our western provinces and territories. We work hard, and if in a few years the reward of our toil is not within our grasp we chafe under the disappointment, become discontented, and determine either to change the political character of our country, or remove to lands where fortunes are said to be more rapidly made. We have a vast territory, but one in which the material obstacles to rapid advance are great. These very difficulties ought to develop in us qualities of patient endurance and steady perseverance—qualities which will ultimately make this Canada of ours one of the greatest nations of the world.

Let us as physicians, not under the influence of haste and worry, but steadily and perseveringly, work in building up our own profession, so that in all matters which pertain to excellence we may be equal to that of the foremost nations.

NOTES OF THREE CASES OF PUERPERAL ECLAMPSIA.

BY A J. HARVEY, M.B., C.M., ED., ST. JOHN'S, NF'LD.

The three following cases of eclampsia may be of some interest, illustrating, as they do, the occurrence of convulsions in the gravid, parturient and puerperal states, and ending in recovery.

Case I. On the 7th September, 1885, I was called to Mrs. A., primipara, in the seventh month of pregnancy. She had been taken ill on the previous evening, but my services not being available she had been attended by another. During the night, and up to 10 a.m., had severe convulsive seizures, the later ones being very severe. She was unconscious, face swollen and distorted, feet œdematous; had previously complained of headache and swelling of extremities; had passed no urine since previous day, and a small quantity withdrawn was loaded with albumen; pulse full and quick. On vaginal examination the head was felt at the brim, no pains or dilatation. A hypodermic of morphine, ½ gr., was given at once, and two minims croton oil placed on the tongue. At 4 p.m., had no return of convulsions, and was somewhat more conscious; ordered a purgative enema, as bowels had not

acted, and a diuretic mixture. In the evening, had been freely purged; consciousness improved and no more seizures; ordered a chloral enema and pulv. jalapæ co., by mouth. On the 8th she was better, pulse fuller, and some secretion of urine, increasing through the day; vomiting had ceased and some milk was obtained. The improvement continued daily, but urine continued albuminous for a considerable time. In a fortnight she was sitting up, her recovery being delayed owing to the condition of the tongue which had been badly bitten; a milk diet and iron were administered. She had felt no fœtal movements since the attack. On the morning of the 10th October, she was confined of a dead fœtus after an easy labor, and made a slow but perfect recovery, and is now enjoying excellent health.

Case II. Mrs. B., primipara, married in Feb., 1885, was taken ill on Sept. 10th, 1885, with convulsions. When I saw her at 6 a.m., she was in a semi-unconscious state, had two seizures since 5 a.m.; had been ill all night, with vomiting and headache, pain in the back and discharge of liq. amnii; legs œdematous, and of late, face had been swollen and general malaise; pulse rapid and rather full. I gave ½ gr. morphine hypodermically, and ordered strong purgatives. At 11 a.m., had two fits in the interval, not so severe; coma deeper. On vaginal examination, head was felt at the brim, os dilated and soft; gave a chloral enema. At noon os was more fully dilated, and, as another fit had taken place, applied Simpson's axis traction forceps, gave but a small quantity of chloroform as coma was deep, and delivered her of a full term living child with some difficulty. There was slight post-partum hemorrhage. There were no more convulsions and consciousness began to return. A diuretic was ordered and next day a pint of high colored albuminous urine was passed. After this the flow became abundant and the patient progressed rapidly and made a good recovery. The infant had several convulsions after birth, on the first day, but survived.

Case III. At 2 am., Dec. 5th, called to Mrs. C., secundipara, in the ninth month of pregnancy. Her father died very suddenly on the previous evening; she had visited his home afterwards and when there was taken with severe epigastric pain which continued after her return home. She had been unable to give vent to her feelings in the ordinary way and was complaining also of severe headache. Her previous health had been excellent and there was no indication of albuminuria. Labor had not set in and she was ordered a chloral and bromide draught. At 11 a.m., said she was better, but still had severe headache and epigastric pain. At 2 p.m. there were seizures of labor, and she was delivered at 4 p.m., easily. Chloroform was given; there was no hemorrhage and uterus was firm. At 8 p.m. complained of violent headache and loss of vision followed in a few minutes by a violent convulsion. I gave a ½ gr. morphine, hypodermically, at once,. At 10 p.m. had another seizure and was ordered a sedative draught. I did not see her during the night, owing to some mistake of the nurse who could not get a messenger, but at 7 a.m. was called to her, and was told that she had a succession of fits through the night alternating with periods of maniacal excitement, throwing herself about and trying to get out of bed. At this time she was very pale and haggard, pulse over 100, and weak, passing urine unconsciously. Gave another hypodermic of morphine, followed in half an hour by a chloral enema, as convulsions continued. After this she slept for two hours, when the enema was repeated, as patient was again getting restless. Urine passed freely, contained no albumen. She was kept under the influence of chloral, and when I saw her in the evening was conscious of her immediate surroundings, but had no recollection of the birth of her child or death of her father. She was kept in ignorance of this latter fact for a week afterwards, when as she was worrying with the idea that something was wrong, the news was again broken to her. Even after this she had no recollection of the events of that evening, except that she went to her father's house. She made a slow but good recovery. In this case the patient had enjoyed good health up to the time of her confinement, which was was somewhat premature, and there was no reason to suspect any renal mischief before or afterwards. The eclampsia seems to have been brought on by purely mental causes, operating at a time when the nervous system was excited and strained. The attacks were as violent and epileptiform as any I have ever seen. Such cases are, I believe, of the rarer forms of eclampsia in the puerperal state, but theri existence cannot be denied.

The value of morphine hypodermically in the renal forms of eclampsia seems, in my experience, to be considerable, but in the nervous variety chloral seems to act most efficiently.

Correspondence

To the Editor of the Canada Lancet.

Sir,—Mr. Bryant in his excellent manual for the Practice of Surgery, states that "Dr. Crawford W. Long, of Athens, Georgia, was the first surgeon who in March, 1842, performed a surgical operation while the patient was completely anesthetized by the inhalation of sulphuric ether."

Those of your readers who have visited the thriving city of Boston must have noticed in walking through the public gardens, the neat and elegant monument erected to commemorate the introduction into medical practice of sulphuric ether as an anesthetic, and the first surgical operation performed under its use in the Massachussetts General Hospital in 1846.

Every day experience is bringing to light that what we are taught to believe were current historical historical facts, will not bear thorough investigation. It is quite easy to see how this could be in matters which took place at a very remote period; but in a question like the present, which had occurred within the lifetime of some persons, it is not easy to understand how there could be such a mistake. I have always been under the impression that ether was first used as an anesthetic in Boston, am at a loss to understand where Mr. Bryant got his information, but he states it as *a fact;* and of course a surgeon of so much practical experience and withal so cautious, must have positive and reliable information or he would not have said so.

It seems highly desirable that the history of anesthesia should be clear and reliable; and as I have no other medical work in which Dr. Long gets the credit of being the introducer of sulphuric ether for this purpose, it has occurred to me that some of your readers, or perhaps Mr. Bryant himself—if he ever reads your popular journal—might kindly throw some light upon the subject. At any rate it seems well worth ventilating in the columns of the Lancet.

C. H. L. Johnston.

St. John, N.B.

Reports of Societies.

THE DOMINION MEDICAL ASSOCIATION

The twentieth annual meeting of this Association took place in St. Paul's church school-room, Hamilton, August 31st and September 1st. There was a fair attendance from Ontario, and Montreal furnished a number of the profession, but the attendance as a whole was not what it should have been.

At 10 a.m. Dr. Holmes, of Chatham, took the chair. After a short address, he introduced the new President, Dr. J. E. Graham.

Dr. McCargow, the chairman of the local committee, then read an address of welcome, and extended to the visitors an invitation to a conversazione to be held that evening.

Dr. Graham replied, accepting on behalf of the Association the kind invitation given.

After routine business had been disposed of, the Association adjourned until 2 p.m.

In the afternoon Dr. McPhedran delivered the address on Medicine, on "The Pathological Conditions and Behaviour of Fluid in Empyema," which will appear in our columns in full in another issue.

The discussion was opened by Dr. Mullin, of Hamilton, who, after speaking of the difficulty of making an early diagnosis between pneumonia and empyema, cited cases to establish his views on the point under discussion.

Dr. Sheard, of Toronto, referred to the cases cited by Dr. Mullin, and believed that both conditions might have been present. The illness might have commenced as a pneumonia and terminated in empyema. He believed the temperature chart was a very important element in the diagnosis of empyema.

The discussion was continued by Dr. Teskey, of Toronto, who opposed the germ theory in this disease. He was of opinion that pus was simply necrosed exudation, the result of severe inflammatory process, and that the presence of bacteria was not a *sin qua non*. He was averse to the use even of the hypodermic syringe in exploring the chest, except in those cases where the diagnosis could be made in no other way. He thought that even so light a traumatism as the introduction of

a syringe might determine the destiny of an exudation. One which might have remained serofibrinous, could in this way become purulent.

After some further discussion of the subject by Dr. Whiteman, of Shakespeare, the President, Dr. Graham, read the annual address, the major portion of which appears in this number.

The address on Surgery was then delivered by Dr. Grasett. It appears in this number. Dr. Hingston, of Montreal, and Sir James Grant, of Ottawa, took part in the discussion of the paper.

In the Medical Section, Dr. Macdonell, of Montreal, read a paper on "Knee-jerk in Diphtheria," in which he stated that, of eighteen severe cases of diphtheria which he had under his care in the Montreal General Hospital, the knee reflex had been absent on the day of admission in ten cases. He believed that in many cases absence of this reflex is the only sign of nervous disturbance, that it often precedes other nervous symptoms, and remains after they have disappeared. His conclusions are:—(1) That in a considerable number of cases knee-jerk is lost from the first beginning of the disease, and thus affords a valuable means of the diagnosis of the nature of the throat affection. (2) That loss of knee-jerk is the first evidence of the disease having attacked the nervous system. (3) Absence of the knee-jerk has no influence on the prognosis.

Dr. W. H. B. Aikins then gave some interesting facts relating to the epidemic of Anthrax at Guelph, and a paper on the "Detection of Typhoid Bacilli in Drinking Water."

In the Surgical Section, Dr. Malloch, of Hamilton, read a "Report of Nineteen Cases of Tracheotomy in Diphtheritic Croup." He advocated: 1. The high operation. 2. Frequent cleansing of the tube with a solution of sodæ carb., followed by one of bichloride. 3. Early operation.

After much interesting matter, given by Drs. Atherton, of Toronto, Trenholme, of Montreal, Bell, of Montreal, Dr. Malloch closed the discussion.

Sept. 1st.

The President took the chair at 10 a.m. After routine business, it was moved by the President, seconded and carried, that Drs. Ross and Stewart, of Montreal, and Graham, of Toronto, be appointed a "Committee on Organization," to consider the best means of maintaining and increasing the usefulness of the Association, and report at next meeting.

Dr. Eccles, of London, then gave an excellent address on "Subinvolution of the Uterus." It provoked an animated discussion, which was taken part in by Dr. Powell, of Ottawa, Dr. Cameron, of Montreal, Dr. Trenholme, of Montreal, Dr. Holmes, of Chatham, and Dr. Bantock, the celebrated surgeon of London, England, whose contributions to the *Lancet* have made his name well known in this country. He did not recommend the use of such powerful agents as nitric acid, which he believed was a dangerous remedy in many cases. Neither did he advocate excision of a part of the cervix as a necessary procedure. He used applications of iodine and glycerine in varying strength, corrected existing misplacements, and in some cases of lacerated cervix adopted Emmet's method.

At the special request of the members, the paper of Dr. Gardner, of Montreal, on "The Year's Work in Abdominal Surgery," was transferred from the surgical section to the regular session. Dr. Gardner is an ardent admirer of Dr. Bantock, and after the reading of his paper, in which a number of exceedingly interesting cases in abdominal surgery which had come under his notice were fully described, Dr. Bantock consented to deliver an impromptu address before the Association, taking as his text some of the points raised by Dr. Gardner in his paper. He deprecated the giving of opium and stimulants after cases of abdominal surgery, and also took occasion to object strongly to men performing such operations, unless they have extended knowledge and experience in this class of surgery. He advised young men who get such cases to send them to older practitioners having large experience. When he himself began the treatment of cases in abdominal surgery, he was unsuccessful in nineteen cases in the first hundred, while in later years the ratio was only about one per cent., showing that practice and experience is an important factor in this description of surgery.

Dr. Rosebrugh, of Hamilton, and Dr. Hingston, of Montreal, followed with further illustrations and descriptions of cases, and then Dr. Bantock answered a number of special questions from the members present.

The Association then adjourned until 2 p.m.

At 2 p.m., the President being in the chair, Dr. Stewart gave an address on "The Present State of Cardiac Therapeutics," of which the following is an abstract:—The means to be employed when treating an acute inflammatory process of the endocardium is to give as much rest as possible to the inflamed valves, and in order to effect this, measures must be taken to lower the blood pressure. To accomplish this, the patient should have complete bodily rest in bed and have as little fluid in his diet as possible. During the continuance of

compensation in cardiac disease all is well, but one of the first signs of failure is shortness of breath. In cases of this description a German theorist, Oertel, taking the view that the heart is a muscle, and consequently will be strengthened by anything that strengthens the muscles, advises violent and continued exercise to cause palpitation of the heart. He also recommends the keeping up of a good state of nutrition, by a diet rich in albumen, and when diaphoresis is not obtainable by exercise, he recommends Turkish baths. Great stress is laid on the importance of preventing fat formation, especially in cases after the restoration of a previous loss of compensation. By following this course of treatment, it is claimed that a patient may maintain his original state, dating from the early compensation, for many years. The exercise should not be overdone, however, and should always be followed by a period of rest. Dr. Franz thinks that there is no danger whatever in patients with heart disease exercising as long as the palpitation induced thereby is quickly relieved by taking forced deep inspirations, which diminish the increased tension brought about in the pul monary vessels. Other physicians recommend judicious exercise, but not of so extreme a kind as Oertel advises. In the opinion of the speaker, it is more adapted to cases of commencement of fatty degeneration and cases of threatened heart failure from deformity of the chest or disease of the lungs. There is a time in cases of loss of compensation where exercise is no longer possible and where medicinal agents have to be resorted to. Of all these agents none is to be compared to digitalis, but there is a very imperfect knowledge among many practitioners of how and when digitalis should be used. The essential therapeutic action of digitalis consists in its power of raising the blood pressure; this increases the secretion of urine; the effused fluids are absorbed from the cavities and tissues of the body, and the respiratory distress disappears. So long as digitalis continues to increase the secretion of urine it is safe to use it, because in health digitalis has no such influence. In cases of dangerous heart failure the patient should, to secure the best results, have absolute rest in bed, combined with digitalis in full doses.

The Association then divided into sections. In the medical section, Sir James Grant read a paper on "Renal Calculus and Cheyne-Stokes Respiration." Specimens of calculi were exhibited.

Dr. Buller then read an exhaustive paper on "Headaches in connection with certain Optical Defects." He believed that headache was frequently caused by an abnormal condition of the superior and inferior recti.

Dr. Macdonell, of Montreal, then read an able paper on "Thoracic Aneurism." He believed that the best results may be obtained with iodide of potassium, with quiet and generous living. He cited some interesting cases, showing the favorable results of such treatment.

Dr. Campbell, of Seaforth, read an interesting paper on "The Albuminuria of Pregnancy," and the following papers were accepted as read: "The Treatment of Pneumonia," by Dr. Bruce Smith; "A Physiological Basis for an Improved Cardiac Pathology," by Dr. Mills, of Montreal.

In the Surgical Section, Dr. Cameron read a most interesting paper, entitled "Some Practical Points in Aseptic Midwifery." He believes that the direct cause of puerperal fever are germs. He advocates the adoption of every means to prevent the invasion of the enemy. But if the germ has entered and symptoms are showing themselves, douche out the uterus thoroughly; if this fail, curette to bring away any clot, membrane, or placenta. If these means do not control the fever, attend to the nourishment and stimulation.

A discussion on the paper was taken part in by Drs. McCargow, of Hamilton, Wright, of Ottawa, Dupuis, of Kingston, Taylor, of Goderich.

Dr. Hingston, of Montreal, gave an excellent address on the "Removal of Naso-pharyngeal Tumors," which we hope to give our readers in another issue. Then followed a paper by Dr. Johnstone, of McGill College, on "Puerperal Peritonitis"; one by Dr. Dupuis, of Kingston, on "The Removal of the Astragalus," and one by Dr. Sweetnam, of Toronto, on "Stricture of the Rectum."

Section adjourned.

The Association resumed its session, the President in the chair. The President stated that he had received the Report on Hygiene from Dr. Cassidy. Owing to want of time, it was taken as read.

Votes of thanks were tendered to the President, Secretary and Treasurer, and to the profession in Hamilton for their great kindness and courtesy. A vote of thanks was also given to the authorities of St. Paul's church for the use of the school-room.

During the afternoon session, the following were elected officers for the ensuing year:—Dr. George Ross, Montreal, President; Dr. James Bell, Montreal, General Secretary; Dr. Charles Sheard, Toronto, Treasurer.

The following local officers for the several Provinces were appointed:

For Ontario—Dr. Eccles, London, President; Dr. J. A. Grant, Jr., Ottawa, Secretary.

For Quebec—Dr. Christie, Lachute, President; Dr. Armstrong, Montreal, Secretary.

For New Brunswick—Dr. Currie, Fredericton, President; Dr. Lunana, Campbelltown, Secretary.

For Nova Scotia—Dr. Nickwin, Halifax, President; Dr. Trueman, Sackville, Secretary.

For Manitoba—Dr. Blanchard, Winnipeg, President; Dr. Chown, Winnipeg, Secretary.

For British Columbia—Dr. N. True, New Westminster, President; Dr. Milne, Victoria, Secretary.

The next place of meeting will be Ottawa.

PROCEEDINGS OF THE NINTH INTERNATIONAL MEDICAL CONGRESS.

SECTION OF GENERAL MEDICINE.

Monday, Sep. 5th, 1887.

The President, Prof. A. B. Arnold, of Baltimore, read an opening address on "The Practice of Medicine at the Present Day."

The next paper was entitled "Some Suggestions upon the Pathogenesis of Yellow Fever," by Dr. Ignacio Alvarado, a delegate sent by the Mexican government.

The third paper was upon "Pneumonia, as met with in various parts of Canada," by Prof. Walter B. Geikie, Dean of Trinity Medical College, Toronto. A somewhat lengthy and most interesting discussion took place after the reading of this paper, during which many practical matters of great importance were brought out.

SECTION OF GENERAL SURGERY.

The section of General Surgery was opened by an address by its President, W. T. Briggs.

The section having been formally declared open by the President, Dr. C. I. Parkes, of Chicago, presented a paper entitled "A Contribution to the Study of Gun-Shot Wounds of the Intestines."

Dr. N. Senn then presented a paper entitled "A Contribution to Experimental Intestinal Surgery," and presented numerous specimens showing the great advantages gained by making intestinal anastamosis rather than resection, in case of intestinal injury. The paper called forth rapt attention from the audience, and Dr. Senn was allowed to speak for more than hour, instead of the legal twenty minutes. The subject was too elaborate to be briefly reported, but the coming report in the published transactions of the Congress will be eagerly awaited.

SECTION OF OBSTETRICS.

The Obstetric section was opened by an address from Prof. Miller, its President, on 1, "The due Restriction of the Operation of Craniotomy"; 2, "The Careful Diagnosis of Extra-Uterine Pregnancy"; and 3, "The Desirability of Rendering the Condition of Patients during the Puerperal State Aseptic, and doing this safely." Then

Dr. J. Braxton Hicks, of London, England, had sent his paper "On the Contractions of the Uterus throughout Pregnancy, and their Value in the Diagnosis of Pregnancy, both Normal and Complicated," which was read by Prof. Earle, of Chicago. The paper presented in detail five points: 1. During the whole period of pregnancy, contractions of the uterus occur at intervals of from five to twenty minutes, which last for from three to five minutes. 2. If external palpation is made during contraction, the uterus will be felt hard and distinct; if during relaxation, it will be felt soft and indistinct. 3. This phenomenon is of value in the diagnosis of normal pregnancy from tumors. 4. The physiological importance of the contractions is to empty the uterine veins of the carbonized blood. 5. There is a constant relation between the presence of the carbonized blood in the uterine veins and the movements of the fetus, and between the latter and the uterine contractions.

Dr. Duncan C. MacCallum, of Montreal, presented a paper on "Vicarious Menstruation."

Prof. T. Lazarewitch, of St. Petersburgh, sent a pair of forceps and a paper describing them, which was read by Dr. Jaggard.

SECTION OF THERAPEUTICS AND MATERIA MEDICA.

Opened by an address by Dr. Phillips, the Vice-President.

Dr. J. M. Carter, M.D., of Waukegan, Ill., read a brief synopsis of the "Medical Botany of the United States," including 140 orders, 620 genera, and more than 1300 species, which are indigenous in the United States.

Dr. J. E. Stewart, of Wilmington, Del., read—"A proposed investigation of the Materia Medica of the world, by the government of the United States.—A plan to promote progress in the science of drugs."

SECTION OF MILITARY AND NAVAL SURGERY AND MEDICINE.

The President, Henry Hollingsworth Smith, M.D., delivered an address on "The Influences of the Geographic and Social Characteristics of the United States upon its Military Service, especially its Medical Staff."

The first paper called was, "On a Short Scheme

for Water Analysis in the Field," by Francis Patrick Staples, M.K.Q.C.P., Ireland; M.R.C.S. England; surgeon and major in H.M.A., Aldershot camp.

The next paper, "On the Necessity of a More Careful Examination of the Water Supply of the Military Posts, when an Unusual Amount of Sickness Prevails, and Examination of Hygienic Surroundings," by Morse K. Taylor, M.D., major and surgeon, United States Army.

The next paper was "On the Best Ration for the Soldier," by Jos. R. Smith, M.D., Brevet-Colonel, Lieutenant-Colonel, and surgeon, United States Army.

A paper on stretchers and slings, by John A. Macdonald, M.D., M.R.C.S., England, was read by title by Dr. Lloyd, who presented the stretcher and sling, and explained its *modus operandi*.

Dr. Valney Harvard's paper on stretchers and stretcher drills was read by title.

The next paper read was on hospitals and other huts, by Dr. Jeffrey A. Marston, M.R.C.P., England.

The next essay was on the construction of field hospitals as illustrated in the depot field hospital of the Army of the Potomac, at City Point, Virginia, in 1864-65, by James Collins, M.D., formerly brevet lieutenant-colonel and brigade surgeon of volunteers during the war of the rebellion, with drawings and diagrams.

SECTION OF DENTAL AND ORAL SURGERY.

The President, Dr. Jonathan Taft, of Cincinnati, delivered the presidential address, which was devoted to a history of the "Rise and Progress of Dental Surgery in the United States."

The President's address was followed by a paper by Dr. R. J. Porre, Cincinnati, entitled "Chronic Pyemia of Dental Origin."

SECTION OF ANATOMY.

President, Dr. William H. Pancoast, Philadelphia, Pa.

The first paper was presented by Dr. Joseph M. Mathews, of Louisville, and was entitled "The Anatomy of the Rectum in Relation to the Reflexes."

Dr. A. L. Ranney, of New York, next read a paper, entitled "Does a Relationship exist between Anomalies of the Visual Apparatus and the so-called Neuropathic Tendency?"

Owing to the absence of Dr. Wile, his paper, entitled "Which shall be the Site of a Urinary Fistula?" was read by Dr. Berry.

SECTION OF PHYSIOLOGY.

President, John H. Callender, M.D.

The first paper presented was by Daniel Clark, M.D., on "The Basal Ganglia of the Brain as Centers of Psychic and Functional Power."

The next paper was by Dr. Richard Caton, of Liverpool, England, read by Dr. Stockman, of Edinburgh. The title of the paper was "Researches on Electrical Phenomena of Cerebral Gray Matter."

SECTION OF MEDICAL CLIMATOLOGY AND DEMOGRAPHY.

Albert L. Gihon, M.D., Medical Director, United States Navy, President, read an introductory address on "The Domain of Climatology and Demography as Dependencies of Medicine."

The second paper was by Dr. George H. Rohé, of Baltimore, on "The Meteorological Elements of Climate and their Effects upon the Human Organism."

Dr. W. Thornton Parker, of Newport, R. I., read the third paper, upon "The Importance of the Study of Climatology in connection with the Science of Medicine."

SECTION OF OPHTHALMOLOGY.

President, Prof. Julian J. Chisholm, of Baltimore.

Dr. Mooren, of Dusseldorf, read a paper on "Eye Troubles in their relation to Occipital Disease."

Dr. Ole Bull, of Christiana, Norway, read a paper on "Pathological Changes in the Retinal Vessels."

Dr. Leartus Connor, of Detroit, read a paper on "Hot Water in the Treatment of Eye Diseases."

SECTION OF PUBLIC AND INTERNATIONAL HYGIENE.

President, Dr. Joseph Jones, who delivered an interesting opening address on "The Causes and Prevention of Disease."

SECTION OF DERMATOLOGY AND SYPHILIS.

President, A. R. Robinson, M.D., New York.

At the conclusion of the President's address, Dr. William Welsh, of Philadelphia, read a paper entitled "Vaccination during the Incubation Period of Variola."

The second paper read was "Rectal Alimentation and Medication in Diseases of the Skin," by Dr. John V. Shoemaker.

The third paper presented was "On the Occurence of Ulcers Resulting from Spontaneous Gangrene of the Skin during the Later Stages of Syphilis, and their relations to Syphilis," by Dr. Herman Klotz, of New York.

LARYNGOLOGY.

President, Dr. W. H. Daly.

In his address, Dr. Daly emphasized the propo-

sition he made at the last International Medical Congress, "That the laryngologist of the future must be more the rhinologist, and the rhinologist more the surgeon than the physician."

Dr. R. H. Thomas, of Baltimore, read a paper upon "The Causes and Treatment of Hay Fever."

Dr. Klingensmith read a paper upon the same subject.

These papers were fully discussed.

Dr. Ingalls introduced the subject of Epistaxis, stating that ordinary cases require but little treatment, often being nature's safe-guard in plethoric subjects.

SECTION OF DISEASES OF CHILDREN.

President, Dr. J. Lewis Smith, of New York City.

The first paper on the programme was "Cerebral Irritation in Children," by Dr. Jules Simon, Paris, France. Dr. Simon was unable to be present in person, and the paper was read by Dr. Judson, Vice-President of the Section.

Second paper, "Deleterious Results in Children of a Narrow Prepuce and Preputial Adhesions," by Prof. Lewis A. Sayre, M.D., New York City.

Dr. de Saint-Germain, of Paris, contributed "Not a Stone for the Edifice; Not Even a Pebble, But Only a Grain of Sand." His short paper ably advocated ignipuncture of the tonsils in place of tonsillotomy. He inserts the thermo-cautery to the depth of three-eighths of an inch, repeating the operation every week, and at the end of three or four weeks the tonsil is reduced to an insignificant stump.

He also in a brief surgical note advocated the substitution of dilation of the prepuce with Nélatons' dilator for circumcision, the operation to be followed by daily massage of glans and prepuce.

A paper entitled "An Investigation to Determine whether the Absence of Sewerage and of Water Pollution Diminishes the Prevalence and Severity of Diphtheria," by Dr. Chas. Warrington Earle, Chicago, Ill., was read.

SECTION OF GYNECOLOGY.

President, Dr. Henry O. Waray, Boston.

After a few remarks by the President, Dr. Nathan Bozeman, New York, read a paper on "Artificial and Combined Drainage of the Bladder, Kidney, and Uterus through the Vagina, with and without Graduated Pressure in the Treatment of Vesical and Fecal Fistulæ."

A paper on "Sterility," by T. More Madden, of Dublin, Ireland. Read by Dr. S. W. Cushing.

We have given above a list of the papers read at the several sections during the *first day only*, Monday, Sept. 5th. And this list by no means shows the amount of work done on that day, for cases were reported, discussions took place, and new instruments and diagrams were exhibited and explained, making each day's work at once most interesting, and at the same time covering a great deal of ground.

OUR NEW YORK LETTER.

TWELFTH ANNUAL MEETING OF THE AMERICAN GYNECOLOGICAL SOCIETY.

The American Gynecological Society held their 12th annual meeting on the 13th, 14th and 15th of September. The papers this year were unusually good, as indeed the names of some of the readers, as Drs. Fordyce Barker, Emmett, Mundé, Lusk, Parvin, Skene, and Bantock, of London, of ovariotomy fame, testify. A great many gynecologists of note staid over from the International Congress to attend and take part in the discussions, and we had the pleasure of seeing and hearing such able authorities as Professor Simpson, of Edinburgh, Drs. Bantock and Grailey Hewitt, of London, Martin, of Berlin, of hysterectomy fame, Unna, of Hamburgh, etc., so that this year's meeting was especially interesting and profitable.

Among other papers was one on "Cysto-Colpocele complicating Labor and Pregnancy," by Dr. Busey, of Washington. The doctor pointed out that this condition was one that demanded far more attention from obstetricans and obstetric writers than it has received so far. Although it is a very rare condition his reported cases and those of one or two gentlemen who took up the discussion shewed it to be a very grave one. He describes the tumor as a soft, yielding, pediculated cyst, suspended from the anterior vaginal wall, generally pear shaped and varying in size from a small egg to a child's head, that this tumor may be mistaken for the bag of membranes or a hydrocephalic head is very likely, but when the os is felt for it can not be found, having been pushed up beyond reach. The practical point is that this condition may come on days and even weeks before the term, and may so closely simulate labor as to cause the accoucheur a great deal of uneasiness, so that he may even undertake some operative procedure. Dr. Busey quoted one of his cases, occuring a month before labor, and Dr. Bookell a case occurring some days before. The abnormal distention of the bladder and the foreign body in the vagina causing pains very much like labor

pains, but differing from them in being more frequent and of a more tearing, tenesmic nature. If this complication should occur during labor it will protract it, more by its reflex, nervous influence, creating false unavailing labor pains, than by its mechanical obstruction. This is shown in the treatment, for after catheterization the uterus descends, the pains change their character to true uterine pains and labor continues.

On scarcely any other question in surgery is there such a diversity of opinion as there is on the question of drainage after laparatomy, as was shewn in a paper on this subject, read by Dr. Paul F. Mundé, of New York. Dr. Mundé believes that all uncomplicated cases do better without a tube, that after thoroughly cleansing the abdominal cavity the absorbent power of the peritoneum is enough for all oozing. He was supported by Dr. Martin, of Berlin, who has discarded the tube except in his hysterectomies and when there is a large ulcerating surface; in both of these cases he drains through the vagina. But Dr. Bantock is a strong champion of thorough drainage, and certainly his very flattering results are enough to confirm his opinions. Out of his last 104 ovariotomies he has only lost three patients, and out of his last 78 he has only lost one. He thinks the reason that others have not had such good results with the tube is because they do not empty them often enough. He uses a straight glass tube which he empties every two hours, and leaves it in until the fluid that comes away is clear serum.

Of course both sides of this question have their advocates, and will have for a long time to come, until a wider knowledge decides for or against the practice, but it certainly does seem that a patient with a tube in, when changes can be watched and hemorrhage detected, is much safer than one without, even barring the accidents of formation of pus, or fistulæ, or peritonitis—all possible effects of the tube.

In a paper by Dr. C. D. Palmer, of Cincinnatti, on "The Therapeutic Value of some Medicines in the Treatment of Hemorrhagic Conditions of the Uterus," the therapeutical qualities of ergot, arsenic, iron, hamamelis Virginiana, virburnum prunifolium, etc., were discussed. Although ergot stands at the head of the list, especially when a immediate action is required, and in the case of a large boggy uterus, the result of subinvolution, there is probably nothing better; still the hamamelis and viburnum have a great reputation among the Americans, both from clinical evidence and from their supposed specific action in constringing the venous walls. Arsenic too was highly spoken of, particularly in those chlorotic cases with a malarial taint. Fordyce Barker's treatment of such is, to put them on three or four ♏ of Fowler, three times daily during the intermenstrual periods, and treat with quinine during the flow. Dr. Lloyd Roberts, of Manchester, and Dr. Bantock both hold to the good old ergot.

Dr. Parvin, of Philadelphia, read a paper urging the use of antiseptics in private midwifery practice, and showed that by using compressed tablets or capsules of bichlorids or other antiseptic, and dissolving them in water, at the bedside, the danger of the patient would be very much lessened, and the accoucheur's reputation correspondingly bettered. He says he always uses them, and we had the testimony of several obstetricians of note to show how beneficial they were. Prof. Simpson threw out a good suggestion on this subject; it is that the residues from all degenerated tissues were mainly in the shape of fatty acids, and from chemical experiments it was found that spirits of turpentine would very effectually dissolve these fatty acids, therefore it was the practice of himself and a great many other English and Scotch obstetricians, to carry a little bottle of turpentine in their obstetric bags, and rubbing their hands well with this, then washing them with soap and water, and afterwards in the antiseptic solution, before ever attempting to examine a woman in labor. This cleans the hands of all impurities, the result of examining old wounds, ulcers, etc., which every one is continually coming in contact with, especially the general practitioner.

Canuck.

Selected Articles.

PROPRIETARY MEDICINES — SHOULD PHYSICIANS PRESCRIBE AND RECOMMEND THEM?

"Should the physician use in his daily practice a 'proprietary' medicine? Can he, as a reputable practitioner, recommend these preparations in his correspondence with medical journals, without lowering the dignity of his profession or making himself amenable to discipline for a violation of time honored principles of medical ethics?"

These questions have been put to this journal, and perhaps to others, with the request that they be answered editorially; and while, as put, they are very broad, admitting of much latitude in replying, we think we but voice the general opinion of those who have give the subject any thought, in answering both of them, in a general way, in the affirmative.

The gist of the whole matters depends upon what is meant by the term "proprietary medicine." In its limited and best sense we understand by the term a remedy of which the ingredients and their proportions are made known to the profession, and the trade or proprietary name of which is

lone protected by law. When such preparations re made exclusively for the use of the medical profession and are advertized exclusively in medical ournals we cannot see any possible lowering of professional dignity or deviation from "time honored rinciples of medical ethics" on the part of the hysician who uses them in his daily practice or who ecommends them in his communications to medical ournals.

The name, in this class of proprietary medicines, s to be regarded simply as the guinea's stamp—a uarantee of the purity and genuineness of the roduct, and the registration of it—patenting it, f you please, is as much for the protection of the hysicians who use it as for the parties who manfacture the remedy. It in no sense makes the drug "patent medicine" any more than does the vriting of "Fairchild" before pepsin, "Merck" efore or after an alkaloid, or "Schering" or "Squibb" before chloroform, transfer these chemials into that category. These men Merck, Schering, Fairchild, Squibb, and a few others, ave devoted their lives and spent enormous sums of money in making their products the purest and best that can be attained y human honesty and human ingenuity; and as reward their names attached in *copyrighted abels* to their chemicals stand as a perpetual uarantee to the physician and patient against he fraud and greed of less honest manufacturers, nd it would be a great injustice to them as well s to the profession and public to deprive them of his guarantee.

The question may be, and frequently *is* asked y the purists, usually by the very old, or by very oung members of the medical or pharmaceutical rofession, aspiring to be considered very scientific, why should a physician resort to these readyade prescriptions at all? Why does he not raw upon his own knowledge of applied therapeuics and write out his own formulæ in every c se? Why does he prescribe this one's sugar-coated pills r that one's gelatin-covered granules?"

Why, indeed? Simply because he knows that hese articles, being made in vast quantities, by mproved apparatus and appliances, manipulated y highly trained and educated employés, and irected by skilled chemists, can be made better, nore accurately and far cheaper than they could e compounded by the most skilful prescriptionist. He does it for the same reason that he buys a vatch ready made from the jeweler, or a buggy eady made from the carriage maker.

The most serious charge that is brought against he makers of some of the best known, most aluable and most frequently used proprietary nedicines, is that the formulæ given by the manuacturers are not the true ones, or, as Dr. Craigill, of Lynchburg, Va., in a paper read before he Virginia Pharmaceutical Association, at its last May meeting (published in the *Virginia Medical Monthly*, for June, 1887), puts it, "a patented proprietary remedy which professes to publish its formulary, *but does not*." If this charge were true, it would indeed be a grave one and a just cause for the banishment of such medicines from the list of those which the physician may use "without lowering the standard of professional dignity," etc.

But when we examine into the matter, we find the sole ground for the charge to be that when the ingredients as named are put together by the physician himself, or by the prescriptionist, offhand, though it may be *secundum artem*, the result frequently differs very widely from the preparation which it is intended to imitate. This fact would go far to prove the charge did we not remember that in all chemical processes *manipulation* has a great deal to do with results, and that the *element of time* has a value that nothing else can supply. A mixture in which no amount of shaking will produce combination or solution offhand, or no amount of filtration will clarify, will frequently become perfectly limpid when given the requisite length of time. We are informed by Messrs. Battle & Co. that Bromidia, for instance, requires six days for the thorough combination of its ingredients. We have no doubt that many other such remedies require even more time for their perfection, and no amount of skill on the part of the pharmacist can possibly make up for this element in their preparation. These facts are fully recognized in France and Germany, and we find the highest class of the medical journals of these countries full of advertisements and notices of preparations exactly analogous our proprietary remedies.—*St. Louis Med. and Surg. Jour.*

MEDICAL NOTES.

In *obstinate hiccough*, always suspect aneurism, and carefully examine for such.

Chronic peritonitis not traceable to an acute attack or to an injury, is almost invariably due to tubercle.

Dr. Musser states that, after all *operations on pelvic viscera*, it is always well to make a routine practice of giving opium by suppository.

No one remedy for *aneurism* can accomplish the good that is found to be derived from prolonged administration of iodide of potassium.

Uterine cancer, in the vast majority of cases, is of the cervix; sarcoma is of the body. One-third of all cancers found in women are of the uterus.

Dr. Bruen, at the Philadelphia Hospital, recently exhibited to the class a case of obstinate *anemia* which has been treated by Fowler's solution alone, with results most gratifying.

Prof. Bartholow prescribed for a case of pure and simple *chorea*, gr. $\frac{1}{8}$ of cocaine morning and evening, and, as most important adjuncts, directed particular attention to be paid to dietetic and hygienic influences.

In long administration of bromides, as in *epilepsy*, no more of the remedy can be utilized by the system in combating the disease than that which will cause anesthesia of the fauces.

For *constipation in infants*, use equal parts strained oatmeal gruel and milk. If this does not act efficiently, try from ʒ ss-ʒj of sodii phosphas in twenty-four hours.—Parvin.

For one of those cases but rarely seen, *cervical pachymeningitis*, with all its symptoms well marked, Prof. Bartholow prescribed gr. v of salicylate of cinchonidine ter die, as the probable cause was a rheumatic diathesis.

Prof. Gross has recently, with marked success, been treating *chronic ulcers* by scraping away all induration and dressing on antiseptic principles. He claims for this method a superiority over the means usually employed.

For *irritable stomach of cholera infantum*, Prof. Parvin speaks very highly of counter-irritation of epigastrium by means of mustard, and the internal administration of gr. v of bismuth with gtt. iij of of aromatic spts. ammonia every hour.

For *exophthalmic goitre*, Prof. Bartholow directed the following :

℞ Extract. ergotæ aquos. . . gr. ij.
Picrotoxin . . . . . gr. $\frac{1}{10}$. M.
Ft. pil.
Sig.—Twice daily.

Also gtt. xv of tincture of chloride of iron, two hours before meals.

Ipecac is also a most valuable remedy in *hæmoptysis* ; its action is twofold : the hemorrhage ceases with the oncoming of nausea, and when vomiting ensues, the lungs are cleared of the blood remaining in the bronchi and their subdivisions, thus lessening the dangers of after complications or sequelæ.

To properly examine a woman's breast, she should be lying on her back. If examined in any other position, it can be so manipulated as to convert it into any tumor. When on her back, examine by pressing the tips of the fingers back through the breast against the chest walls, and not by pinching the structures up between the fingers.—Prof. Gross.

For *thread-worms*, at night give gr. j of calomel and gr. ij-iv of santonin ; the following morning inject a cleansing enema of water, and follow this by the infusion of quassia. To destroy the ova hidden in the folds of the anus and adjoining parts, apply locally a one per cent. solution of carbolic acid by sponge ; never use the acid as an injection, however.

Prof. Bartholow speaks quite highly of iodide of ethyl for *asthma*. It should be inhaled from a bottle, being vaporized by the heat of the hand, the patient, breathing strongly and deeply ; this should be continued each sitting until a hot, stuffy sensation is experienced in the chest. At times it may cause coughing. Asthmatics should, as a rule, take a light supper, to avert the attack which is usually nocturnal.—*Col. and Clin. Rec.*

PRURITIS OF THE FEMALE GENITALS.

The following formula is recommended by Meigs for pruritus vulvæ :

℞ Boracis . . . . . ʒ iv.
Morphinæ hydrochlor. . . gr. vi.
Aquæ rosæ . . . . . ʒ viss.
M. Sig.—Bathe the parts affected.

Between the applications, lycopodium or starch flower may be dusted upon the affected parts.

Vaneedem's prescription is :

℞ Chloroform . . . . . .
Sulphuris . . . . . .
Sodii carbonatis . . . āā . ℈ iv.
Morphinæ acetatis . . . . . gr. vi.
Vaseline . . . . . ʒ v.
M. Ft. ungt. Sig.—Rub upon the parts.

Lebert's formula is as follows :

℞ Hydrargyri bichlor. . gr. viij-gr. xvi.
Spt. camphoræ . . . . f ʒ viiss.
Aquæ destill. . . . . f ʒ x.
M. S.—Bathe twice daily with the lotion.

For pruritus of the perineum, Hancke gives the following prescription, to be applied by the means of a sponge every two hours. For pruritus of vulvæ, dilute four-fold :

℞ Iodi. . . . . gr. xv.
Potass. iodidi . . . . . gr. xl.
Dissolve in aquæ dest. . . f ʒ v.
Add alcohol dil. . . . . ʒ viiss.

Pleuck's salve for pruritus pudendorum is made of the following :

℞ Ungt. hydrargyri nitratis . ʒ viiss.
Hydrargyri oxidi rub. . . gr. xx.
Adipis . . . . . ʒ iv.
M.—Ft. ungt.

Cazenave prescribes :

℞ Zinci oxidi . . . . . ʒ ss.
Camphoræ . . . . . gr. viij.
Amyli . . . . . ʒ viiss.
M.—Ft. pulvis. Sig.—Dust upon the parts.

Dr. Thomas, in cases of pruritus due to vaginal

leucorrhea, advises vaginal injections of the biborate of sodium in solution, and once or twice a week he cleanses the cervix thoroughly of mucus, and applies the nitrate of silver occasionally; chemically pure nitric acid is used with the hope of altering the secretion. Copious injections of water are continually used, and a suppository of of cocoa-butter containing, gr. v of tannin or gallic acid, is placed against the cervix twice daily.

Trousseau recommends a solution of carbonate of potassium (ʒiii ad fʒiv) for pruritus vulvæ. A formula advised by Fox is as follows:

℞ Acetate of ammonia . . . . ℥ j.
Dilute Prussic acid . . . ʒ iss.
Infusion of tobacco . . . ℥ viij.

M. Sig.—To be sponged on the part twice a day in pruritus ani or p. vulvæ.

Bartholow recommends the following lotion:

℞ Hydrargyri chlor. corros. . 1 part.
Alum . . . . . 20 "
Starch . . . . . 100 "
Water . . . . . 2500 "

In case the pruritus comes from the presence of animal parasites, a mercurial treatment is advisable. The black or the yellow wash, or mercurial ointment may be used. The common sulphur ointment is powerful enough to kill the ordinary *Acarus scabei*.

Another formula of Thomas is very desirable as a vaginal injection and wash for the vulva:

℞ Plumbi acetatis . . . . . ʒ ij.
Acidi carbolici . . . . . ℈ ij.
Tinct. opii . . . . . f ℥ j.
M. Aquæ . . . . . O iv.

Another topical application of demonstrated value is:

℞ Bismuthi subnitratis . . . . .
Acaciæ pulv. . . . . āā . . ʒ ij.

M. Sig.—Add water to the consistency of cream, and apply frequently with a brush.

The following is also excellent:

℞ Pulv. acaciæ . . . . . ʒ ij.
Bals. Peru. . . . . f ʒ j.
Ol. Amygdalæ . . . . . f ʒ iss.
Aquæ rosæ . . . . . f ℥ j.
M.

And the following will be found an excellent lotion:

℞ Acidi carbolici . . . . . ʒij.
Glycerinæ . . . . . f ℥ j.
Aq. rosæ . . . q.s. ad. . f ℥ viij.

M.—Ft. Lotio.

It must not be forgotten that diabetic urine often produces obstinate and severe pruritus, so that examination of urine is always advisable in such cases.

Hysterical or neurotic pruritus is best treated with a four per cent solution of hydrochlorate of cocaine.—*Med. and Surg. Rep.*

CANNABIS INDICA IN DIARRHEA.

Dr. S. J. Rennie, of Cawnpore, in the *Indian Medical Gazette* for December, 1886, calls attention to the value of cannabis indica in the treatment of dysentery. We wish to draw attention to its value in a similar condition, namely diarrhea; especially in the type known as summer diarrhea or English cholera. Attention has been drawn to it in this connection by Dr. Turner, of the Holloway Dispensary, in the *Lancet* (vol. ii. 1866, p. 536): he says, "In ordinary diarrhea,' (referring to summer diarrhea presumably) "the formula" (mentioned in a previous part of his letter as very valuable in cholera namely

℞ Tincturæ cannabis indicæ . . ♏ x.
Spiritus chloroformi . . . . ♏ x.
Tincturæ kino . . . . . ʒ j.
Aquam menthæ piperitæ ad. . ℥ j)

"in a modified dose, will be found very serviceable. Being connected with a dispensary where thirty to forty cases of diarrhea presented themselves daily for treatment during the months of August and September, and where a great variety of remedies were tried, so great was the superiority of Indian hemp above the others, that the patients themselves got to know it, and invariably asked for the green medicine."

We have been in the habit of prescribing it in nearly all forms of diarrhea with marked benefit, combined with medium doses of morphine. In summer diarrhea the effects are very striking. There is no necessity to record cases, they are all very much alike; the great depression, the frequent watery stools, the vomiting, and the cramp-like pains are very quickly relieved, the appetite speedily returns, and by the following or third day the cases are practically well, except for some weakness and debility. The formula we generally use for an ordinary adult is:—

℞ Tincturæ cannabis indicæ ♏ x.
Liquoris morphinæ . . ♏ v vel. ♏ x.
Spiritus ammoniæ aromatici ♏ xx.
Spiritus chloroformi . . ♏ xx.
Aquam ad . . . . . ℥ j.

To be repeated every 1, 2, or 3 hours according to circumstances. Directions: *No food for several hours, but a little brandy and water.* We have not seen one case run on to a fatal issue under this treatment. It appears to act by increasing the astringent and anodyne properties of the morphine (the dose of morphine would have very little effect alone), by its stimulant effect on the nervous system, improving the tone, and by improving the appetite; thus enabling the system to quickly

overcome the marked depression and exhaustion. Most remedies in this disease rather retard the return of the digestive functions, but from our experience Indian hemp markedly accelerates it. Indian hemp seems also to frequently counteract the bilious action of morphine, as well as the loss of appetite, and allows it to be given where it otherwise would not be tolerated.

In other forms of gastro-intestinal disturbance it is also valuable, probably for the same reasons. It was of marked use in a case of subacute gastro-enteritis, which had existed for a few weeks before it came under our care, in a girl aged 13 years, showing the following symptoms:—marked anemia, which had gradually come on after the other symptoms; constant pain over the abdomen, especially in the epigastric region, increased on pressure and after food; tongue covered with yellowish-white fur; loss of appetite; vomiting at variable times after food of partly digested material; diarrhea, six or eight stools in the day, which were watery and green, containing partly digested food material; some rise in temperature—a little over 100° F. She was first treated with bismuth, then with effervescing mixtures, with no benefit; then with the cannabis mixture (modified to suit her age), and the symptoms very quickly subsided, the vomiting and diarrhea were checked, the pain ceased, and the appetite returned. By the end of the week all the symptoms had disappeared except the anemia, which persisted for a short time longer.

In cases of tuberculous diarrhea we have not seen much benefit, beyond a slight relief of symptoms for a short time, though we have not had sufficient experience in this type; nor in the excessive diarrhea in typhoid fever.

The use of cannabis indica in diarrhea is certainly not new, as the quotations previously given will show; and an old dispensing chemist informed us that some twenty years ago he knew it to be frequently prescribed; but probably from the introduction of many new remedies, and from good specimens of the drug having been not always obtainable, it has with many other valuable remedies been temporarily forgotten. We can find no mention of it in modern works on medicine.—Drs. Bond and Edwards in *The Practitioner*.

Treatment of Burns and Scalds—Prof. Mosetig, (*Cent. f. d. ges. Therap.;*) during the last five years, has treated with iodoform 48 severe cases of burns and scalds with the most satisfactory results. The danger of iodoform-intoxication in burns is merely theoretical. The patients obtain ease a few minutes after the application, and are soon fit to be moved. The patients, in Prof. Mosetig's words, repose quietly and without pain in their beds; they recover more rapidly, with only moderate and consequently less exhaustion discharges, and with smoother cicatrices, than those differently treated; and if there is no possibility of saving the life, euthanasia at least is produced. Iodoform, although inert against the dangers to life from oligocythæmia and the nervous shock, guards against the danger of sepsis. Prof. Mosetig, uses iodoform in every limited quantities only. He rarely employs the powder and when he does he sprinkles it by means of an insufflator in every thin layers, only on those places where the integument has been burnt in its whole thickness, and has assumed a parchment-like appearance. As a rule he covers the injured parts directly with compresses of iodoform gauze prepared by impregnating with an etheric solution of iodoform the purified gauze which has previously been freed of grease. He proceeds in the following manner: After opening and excising the vesicles, and cleaning the burns with cotton-wool, which has been steeped in a half per cent. solution of table salt, and well pressed out, he covers the wound with dry compresses consisting of several layers of iodoform gauze, prepared as stated apove, of corresponding size, which are exactly and smoothly laid over the whole surface of the injury. Over this an equally large or somewhat smaller piece of gutta-percha tissue is placed, taking care that it does not form folds or creases. The whole is wrapped in a very thick layer of medicated absorbent cotton-wool which overlaps to a great extent the compresses, or, better, surrounds the whole limbs or injured parts of the body. This cotton-wool is finally fixed by several turns of bandages, which at the same time exert a gentle pressure. This simple dressing is allowed to remain, without being changed, as long as possible *i. e.* as long as cleanliness permits, and no rising of the temperature takes place. The secretions from the wound drain off beneath the gutta-percha tissue, and are taken up by the absorbent cotton-wool. Slight staining of the bandage is no sufficient indication for renewing the dressing, which ought to be permanent; in cases of real imbibition and offensive smell, only the external dressing has to be removed and changed; the iodoform gauze, and the gutta-percha covering, however, should not be interfered with. In case fever should set in, which betrays by its character septic causes, generally the demarcation and separation of the mortified part having commenced, or a retention of the secretion of the wound having taken place, the dressing must be removed, the abscess opened, and free discharge of the pus secured; the mortified shreds and the eschars must be removed by means of forceps and scissors. The new dressing is put on in the same manner as the first one. The impermeable covering of gutta-percha tissue is very essential, and ought never to be omitted. The discharges may be allowed to dry in the external portion of the dressing, but never on the wound itself. Burns of the second degree, as a rule, heal under a single dressing; in

burns of the third degree, aseptic separation of the eschar, with but slight secretion, frequently takes place, and even if the latter be not the case, the granulating surfaces heal in a far shorter time, and the cicatrization is smoother, more even, and altogether less disfiguring than in non-aseptic treatment. In burns and scalds of the face an iodoform-vaseline ointment (1-20) is employed, and covered with a mask of gutta-percha tissue. The ointment has to be daily renewed, and is spread on at the thickness of a knife-blade.—*Lon. Med. Rec.*

Dupuytren's Contracture.—From the description by Langhans of the histological conditions of the cords of tissue removed in a case of finger contracture, as given by Kocher ("*Ctrlbl. f. Chir.*"), the trouble seems to consist of neoplastic or inflammatory changes, partly in the palmar aponeurosis, partly in the neighboring tissues, including the coats of the arteries and also the capillaries, about which a subendothelial granular adventitia has formed. The principal change is the great increase in number and size of the cells of the tissues affected, causing a very great crowding, with the appearance of granules, either rod-shaped or oval, for the most part regularly arranged in a longitudinal direction, separated laterally by fibers of the ground-substance. These present, after staining with borax-carmine, under the microscope the appearance of reddish stripes or bundles. Only in the middle of the most granular places is this regular arrangement interrupted. Here the granules are shorter and broader, and lie very close, in every possible relation to each other, so that the fibrous structure of the aponeurosis seems lost. When the granules lies upon the surface, they resemble vesicles. The adventitia of the arteries is very rich in granules, mostly oval. An occasional round one is seen, perhaps an oval one seen foreshortened. No migration of leucocytes was found to mark an inflammatory process. Langhans, on this account, is of the opinion that the trouble is neoplastic. Kocher maintains that the migration of leucocytes has not been excluded with certainty, and that their absence is not sufficient to prove the condition to be non-inflammatory. He considers it a chronic plastic inflammation. In either case, the evidence is indubitable that it is a disease of the palmar aponeurosis, and that a mere division of the skin or aponeurosis can not give lasting benefit, in whatever way it may be peformed. Kocher maintains that the proper operation is the complete extirpation of the aponeurosis with all its offshoots through a single integumental incision, with immediate closure of the wound with sutures. Primary union usually takes place. If this is done in the early stages, a soft, non-adherent cicatrix remains. In old cases the skin is sometimes more or less adherent; the adherent portions should be excised.

If Langhans' opinion that there is a neoplastic formation is correct, the entire extirpation of the aponeurosis is the only operation which promises any security against recurrence of the disease.—*N. Y. Med. Jour.*

Pathology of Uterine Vomiting and of Hysterical Attacks.—Dr. Graily Hewitt says that the condition of the nerve centres as well as of the uterus must be considered in this connection. Assuming that the vomiting and the hysterical attacks are reflex acts starting in an "irritation" of the uterus, it seems proper to suppose that, in a given case, there is (*a*) abnormal excitability of the nervous centre as well as (*b*) abnormal irritation of the sensory nerves of the uterus. The preponderance of either factor is compatable with the occurrence of reflex phenomena.

Factor (*a*)—For a long time I have been of the opinion that hysteria occurs particularly in conditions of malnutrition and have even concluded that the undue excitability of this disease is dependent on malnutrition of the nerve centres. The success of the Weir-Mitchel treatment of hysteria lends great support to this view. Dr. Gowers also deprecates the wide use of the term "functional disease," and says that, in a very large number of these cases, their must be more than mere derangements of function; there must be a change, and a considerable change, in the nutrition of the nerve elements. The subjects of these so-called "functional nervous diseases" are emphatically starved individuals. There is usually a history of inappetency, insufficient feeding and gradual weakening of all the vital forces as a result.

Factor (*b*)—The uterine irritation that gives rise to reflex phenomena must operate through the sensory (afferent) nerves. This may or may not be accompanied by painful sensations referred by the patient to the uterus. There is strong reason for believing that compression of the nerves of the uterus is the starting point of the reflex act. This compression may be brought about by sudden flexion of the uterus or by sudden increase of flexion of an already flexed uterus, by congestion, by small fibroids imbedded in the uterine walls, and by induration of the uterine tissues.

As to the ovaries, I have not found them notably sensitive or unusually swollen in these cases—even when prolapsed and tender they did not seem to be necessarily associated with either nausea or hysteria. Cases hitherto reported by me afford conclusive proof of the pathological views above expressed. They were treated, as a rule, with the most marked benefit on the supposition that the altered shape and position of the uterus were the cause of the uterine irritation. Those cases that most resisted the attempted im

provement in the shape and position of the uterus were the slowest to respond to treatment. Complete restoration of the uterus to its normal shape and position is not absolutely essential—even partial restoration is often sufficient to benefit the patient materially.—*Brit. Med. Jour.*

Osmic Acid in Sciatica. Neuher first suggested osmic acid as an antineuralgic remedy, and published the results of three cases, two of sciatic neuralgia, and one of the facial. From ten to twenty-five injections were required to effect a cure. Eulenberg obtained three radical cures and four ameliorations out of twelve cases. Many others have used it with very much the same results, *i.e.*, with benefit in some cases, and without benefit in others. Dr. Stékoulis has tried it in twelve cases (six men and four women) of idiopathic sciatica, the duration of which varied from fifteen days to two years. The result of the treatment was eight successes, one much improved, and one in which the remedy proved inert, after four injections, beyond which the patient refused to go. Its effect is explained by the well-known effect of osmic acid on certain constituents of nerve-tissue. No abscesses nor other inconvenience followed its use beyond the pain at the time of the injection. An aqueous solution, containing one per cent. of acid, is generally used, of which about sixteen minims are injected. It stains the skin and clothes black. The injection should be made *loco dolenti*, at first daily, then less frequently.—*Lond. Med. Record.*

Artificial Vagina—M. Polaillon has communicated to the *Société de Chirurgie* a case complete absence of vagina in a woman of 21, and of the successful making of an artificial one. At 15 the girl experienced pains in the genital organs at irregular intervals, and these became at last regular and monthly. The external genital organs were well developed and of normal conformation, only, there was no vaginal orifice. Palpation of the abdomen, combined with the rectal touch and the introduction of a sound into the bladder, demonstrated the existence of a uterus and a neck, while it still further confirmed the absence of a vagina. The operation was divided into two parts, separated by a few days' interval. In the first a path was incised reaching nearly to the uterus, and in the second, 23 days afterward, the uterus was reached and its opening incised. There were no accidents, no lesion of the bladder, rectum, or peritoneum. When the patient left the hospital seven months after the operation, she possessed a vagina which permitted copulation. She had not become regular, owing probably to a congenital malformation of the uterus. But the excessive pains to which, before the operation, she had been subjected monthly, were replaced simply by a menstrual malaise which was quite supportable.—*L' Union Médicale.*

Diabetes and Glycerine.—W. B. Ransom, of Trinity College, Cambridge, reports the following conclusions from experiments bearing upon this subject in the *Journal of Physiology.*

These experiments tend to show :

1. That certain forms of glycosuria may be checked by glycerine.

2. That glycerine acts more efficiently when introduced into the alimentary canal than when injected subcutaneously.

3. That glycerine checks glycosuria by inhibiting the formation of sugar in the liver.

4. That in this way glycerine may lead indirectly to an accumulation of glycogen in the liver.

Viewing the formation both of glycogen and sugar as a process of cell metabolism, quite independent of ferment action, he is unable to suppose that glycerine produces its effect by acting on a ferment in the blood, but considers it probable that it exercises some direct influence on the protoplasm of the liver cells.

Of a possible therapeutic use of glycerine in diabetes mellitus he is not now in a position to speak. The reports of clinical observers are very various, and his own observations are as yet too few to form a basis for definite conclusions.—*Med. Progress.*

The Treatment of Lupus by Injections of Corrosive Sublimate.—Dr. Inginio Tansini, of Lodi (*Gazetta degli Ospitali*), narrates the treatment of a case of lupus of the nose and face by means of repeated injections of corrosive sublimate. He began with a weak solution: corrosive sublimate 50 centigrammes, distilled water 100 grammes. This produced no reaction of any kind. A stronger solution—corrosive sublimate 1 gramme, distilled water 100 grammes—was then used. This produced some tumefaction and œdema in the neighborhood of the punctures, and slight suppuration in some of them. Some fourteen or fifteen injections of a few drops were practised. Improvement soon became marked, and eventually all traces of the disease disappeared, the only marks left being those of the punctures in which suppuration had taken place. Dr. Tansini was led to try these injections by the following considerations: 1. That lupus is a form of tubercle. 2. That the bacilli are few and have no tendency to diffuse themselves. 3. That corrosive sublimate has proved certainly destructive to bacilli. He claims advantages for this method on account of lessened pain and disturbance, and superior cosmetic results.—*The Lancet.*

Prof. Virchow has arranged to accompany Dr. Schlieman on his visit to Egypt next spring.

THE CANADA LANCET.

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THE NINTH INTERNATIONAL MEDICAL CONGRESS.

Since our last issue, this famous gathering of the profession from all parts of the world has taken place. To say that the profession occupied Washington for the week, beginning on Monday the 5th of September, would be almost literally correct. Here, there, everywhere, on the streets, in the halls where the sections met, were to be seen legions of medical men, Great Britain, France, Russia, Austria, Germany, Italy, Switzerland, Belgium, Spain, Mexico, the Dominion of Canada, and every state and territory of the neighboring Republic, as well as countries we have not named, were represented there. Not far from 3,000 medical men had their names registered as members of the Congress. By the end of the second day, about 2,800 names were given in. Proceedings began at 11 a.m. on Monday, the 5th ult., in Albaugh's Opera House, which was crowded in every part, hundreds being unable to gain admission.

Dr. Henry Smith, Chairman of the Executive Committee, called the assemblage to order at the appointed hour, and after a few opening remarks, called upon the President of the United States to open the Congress. President Cleveland occupied only a few minutes, and after a few well chosen words, declared the Congress open for the transaction of business.

The officers of the Congress were then appointed, Dr. N. S. Davis, of Chicago, being chosen President, and the names of the several other officers as agreed upon by the Executive Committee, were read over and unanimously approved of.

The President introduced the Hon. Thomas F. Bayard, Secretary of State, who delivered a most brilliant and scholarly address of welcome, as nothing done at the Congress was more universally praised than this admirable address, the closing part of which we give in full.

"We welcome this Congress as guardians of the sanitation of the Nation. In your profession we recognize the noblest school of human usefulness, and in the progress of the department of the development of the law of cure, the mitigation of suffering, the prolongation of human existence, and the efforts to discover the true principles by which life can be made 'worth living.' We have learned to appreciate our debt to those whose highest reward is the 'still small voice' of gratitude and consciousness of benefaction to the human race. Gentlemen, I confidently promise your convention a worthy audience, not alone the members of your profession here assembled, nor the limited number whom this building can contain, but that vaster audience, to whom upon the wings of electrical force, your message will be daily borne far and wide, to the listening ears of more than sixty millions of American citizens. Sure am I that your message will be worthy, and equally that your thoughtful deliverances will be welcomed by a Continent. The closer relations of mankind, which modern invention have induced, have necessarily been accompanied by an increased dissemination of disease, and the need is obvious of frequent international conferences, that, in the grand sweep of scientific observation, new discoveries in the healing art may be promptly attested and applied in counteraction. Forgive me, if as one of the great army of patients, I humbly petition the profession that in your deliberations, Nature may be allowed a hearing when remedies are proposed; that her vis medicatrix may not be omitted in computing the forces of cure, and that science may be restricted as often as possible to sounding the alarm for Nature to hasten, as she surely will if permitted, to the defence of the point assailed. My duty is very simple, and I fear I have already overstepped its limit, for there was indeed little more for me to say than to repeat the words of an ancient whose cottage was close by the battlefield of Waterloo, and, being somewhat deaf, and hearing the sound of the artilery when the famous 'pounding' was hardest, thought she heard someone knocking at her door and simply said, 'Come in.' This may seem an unscientific illustration of auscultation and percussion, but you need not make half the noise of Wellington and Bonaparte, and I can assure you the American people will

hear you and heartily say to you, as I do for them, 'Come in.'

This formal welcome was responded to briefly by representatives of the profession from Great Britain, France, Germany, Russia and Italy, after which, the President of the Congress delivered his opening address, at the close of which the Congress adjourned in order that the numerous sections might meet for work. And a glance at the resumé we elsewhere give, will show how much hard work of all kinds had been prepared and was energetically gone through with in the respective sections during the week.

THE STUDY OF MATERIA MEDICA.

The burdens of a medical student's college life have been increasing by leaps and bounds during the past few years, yet while new work is constantly added to their courses of study, our authorities seem very loth to relieve them of old-fashioned, useless, and obsolete matters which might be omitted. In no branch of medical study is this so apparent perhaps as in materia medica. It is the *bête noir*, not only of the medical student, but also of the young practitioner. How many men begin practice with a practical knowledge of this most important subject, we leave it to our readers to judge from their own personal experience. In perhaps no other subject is a young man so utterly befogged as in this; out of a multiplicity of half-remembered and ill-digested facts, consisting of doses, officinal and non-officinal remedies, proportions by weight and measure, new remedies, etc., he is able to satisfy himself hardly at all, when he comes to prescribe for his patient. Empiricism reigns, if not supreme, at least nearly so in his prescribing, during the early years of his practice, and indeed until he has forgotten two-thirds and more of the almost useless mass of *facts* he was at so much pains and labor to master. And this empiricism in therapeutics reigns thus supreme, largely because it is *impossible* for the student to acquire all the facts required of him, and at the same time have anything like a comprehensive idea of the principles of the action of medicines. Now, students are expected to know the physiological action of drugs, which, as is well known, is a subject about which almost nothing was known till quite recently. It is undoubtedly necessary that the action should be known, if we expect rational treatment to be the rule, but while this has been added, nothing has been removed, not even the most useless and senseless requirements of the old schools. Does one lecturer on materia medica out of a two hundred, come out of his class-room after he has closed his course, prepared to pass an examination on the quantities of crude drugs, from which the various pharmaceutical preparations are made? We believe not, and we should perhaps think less of the one who could, than of each of the ninety and nine who certainly could not pass such utterly worthless examination. Yet a lecturer must repeat such work, give facts and figures, even down to fractions, when he is going over his course with his class. It would be absurd to call such repetition of facts and figures teaching or even lecturing. It is not in any sense either, and it is a great pity that such a bar should be placed in the way of true progress by those who make our medical curricula, and who should and we believe do know better, for they have themselves experienced the difficulty. These students are to become medical practitioners, and not manufacturing chemists, and it is utterly irrational to ask them to burden their memories with such matters which even the manufacturing chemist would not think of doing, but would obtain from books when required. As was well and truly said by the late Professor Sherpey, "You may as well require of a medical student a knowledge of the whole art of cutlery before you ask him to dissect."

We do not think any sensible examiner would ask for, or place much stress on such parrot-like knowledge, but occasionally one is found who thinks his only duty as examiner is to find out, not what a student does, but what he does *not* know, and who dives into the fractional proportions of various preparations, and is shocked (?) if the student cannot answer what he himself perhaps could not have answered two hours before, nor two days after. Thus while lecturer, student and examiner know that this kind of knowledge is practically useless, and while the lecturer feels the absurdity of wasting valuable time on it, and the student the hardship of getting it up, there the requirement hangs, like a sword over the devoted head of the student, who always feels that such knowledge may be required of him at

his examination, and who is obliged to spend hours upon hours in such preparation, which might be profitably spent in acquiring a knowledge of *principles*. Doses have to be learned, and what is more, remembered, but surely here are enough *facts* for all the Gradgrinds in creation.

Some medical council that has enough *nous* to undertake the cleansing of this Augean stable, and will carry the cleansing process to completion, will have the gratitude of generations of lecturers on materia medica, and medical students yet unborn. Lauder Branton, in the preface to his grand work on Materia Medica, says: "I am so much impresed with the necessity of lessening the amount of unnecessary work sometimes required as a preparation for examinations, that at first I omitted from this book all reference to the composition of pharmaceutical preparations. But as it is intended not only as a text-book for students, but also for the use of practitioners, I afterwards considered that it might be convenient to have the composition of some pharmaceutical preparations, at least, for the purpose of reference. I have omitted the composition of such preparations as are likely to be got ready-made from a chemist, but have inserted the composition of infusions which often need to be prepared when required. I have also given the composition of various compound pills, but only for the purpose of reference."

Such a statement from such a source should surely have weight, and we believe that every thinking medical man will agree with us that it is high time medical students should be relieved of this night-mare, which has so long afflicted them.

THE DOMINION MEDICAL ASSOCIATION.

The twentieth annual meeting of this Association, held at Hamilton July 31st and Aug. 1st, was perhaps more successful than most former meetings. Ontario was well represented, but the other Provinces sent no members except Quebec, and they were, we believe, all from Montreal. It is to be regretted, that the French portion of the profession in the lower provinces does not fall into line with their English brethren, to make the meetings truly Dominion in their character. One of the reasons for holding the meeting last year at Quebec was, that it was hoped that the medical men of the East would, from propinquity, take an interested part in the proceedings. But on that occasion as at the last meeting, Ontario sent the great majority of members. Nevertheless, the number of members at this last meeting was greater than the average, and the proceedings were characterized by more than usual interest and spirit. The presence of Dr. Bantock, of London, lent additional zest, his address on Abdominal Surgery being extremely valuable.

It is proposed that at future meetings there shall be a section for Obstetrics and Gynecology, which will be, we believe, a step in the right direction. There is surely at present a craze on the subject of diseases of the female genital organs, though the wave has reached its height and is beginning to recede, yet the section will be of as much importance and value as those on medicine and surgery. The time for the transaction of the Society's business being considered too short, as indeed, all the papers could not be read and discussed, it is suggested that in future, the proceedings shall occupy three days instead of two.

The address of the President, Dr. J. E. Graham, of Toronto, was exceedingly interesting and was well received. We give the major portion of it in this issue. The papers by Drs. McPhedran, of Toronto, Eccles, of London, and Stewart, of Montreal, were especially good. Dr. Stewart gave a valuable and timely paper, for while all medical men use digitalis, and some few its congeners, few use them rationally. Digitalis is the routine for heart troubles, but how many know when not to use it, or in what doses to exhibit it.

The profession of Hamilton are to be congratulated and thanked for the efforts they made to entertain their visiting brethren. They have the satisfaction of knowing that, socially, the meeting was a great success, and that the visitors, one and all, carried away pleasant recollections of a delightful gathering and a high opinion of the geniality and hospitality of Hamilton's professional men.

The election of Dr. Ross, of Montreal, as President for the coming year, meets the approval of every one. He has for years shown the greatest interest in the welfare of the Association, and is eminently qualified for the position to which he has been elected. We apprehend that the meeting next year will be, under his presidency, a marked success.

THE BRITISH MEDICAL ASSOCIATION.

The fifty-fifth annual meeting of this, the largest and most influential association in the world, was opened at Dublin, Aug. 2nd. The retiring president, Dr. Withers Moore, of Brighton, made a brief speech, when Dr. John T. Banks, Regius Professor of Physic in the University of Dublin, the President-elect, was conducted to the chair, and responded in an appropriate manner. The attendance was unusually large and the proceedings were characterized by their great interest, so that the meeting will long be remembered as one of the most useful and enjoyable that has ever been held. Among the addresses of especial interest and value may be mentioned those by Professor Gardner, of Glasgow, on medicine, Professor Hamilton, of Dublin, on surgery, and the historical retrospect by the President. Dr. Bastian's paper on aphasia was received with marked interest. The question of alcoholism, which is now attracting so much attention all over the civilized world, was, we are glad to learn, freely discussed, and it is to be hoped that the results of such discussion by this body, the most competent of any in the world to undertake its consideration, may be followed by results which will be felt wherever the curse is known. Professor Kocher, of Berne, read a paper on "Cachexia Strumpivira and Myxœdema," which was well received. Apostoli's plan of treatment of fibroid tumors of the uterus by electrolysis was explained to the edification of those interested in the obstetrical section, and Sir William Duncan, Dr. Stevenson and others bore witness to having proved its efficacy. Socially as well as scientifically the meeting was a great success. The committee of arrangement left nothing undone to make the visitors thoroughly enjoy their visit to the ancient and venerable city, which in itself is of great interest as having long been one of the chief seats of medical learning in Europe.

It may be interesting to our readers to know that the association numbers over 11000 members, that the total circulation of its Journal exceeds 13,000, and that financially its affairs are in a condition of the highest prosperity.

New Remedy for Night Sweats.—Dr. Pope, in a letter to the *Therapeutic Gazette*, speaks highly of *Potentilla canadensis vel* Pot. sarmentosa, as a remedy in night sweats. He says:—"I have stopped night sweats with it when atropine failed to relieve." It is pleasant to take; when drawn, it has an agreeable odor, much like table-tea. The manner of using is to pour boiling water on a handfull of the vine, leaves, and root. Let the patient drink *ad libitum*. The remedy is indigenous and may be gathered "about your own homes."

New York Polyclinic.—This admirable school of Clinical Medicine and Surgery for practitioners, was opened for its Sixth Annual Session, Sept. 19th. The class last year was 301 in numbers, probably the largest class of practitioners ever brought together in one year in any school. Two large lecture rooms have been added to the college building, and a laboratory for the study of Bacteriology has been thoroughly equipped.

Rideau and Bathurst Medical Assciation.—At the last meeting of this Society, the following officers were elected:—President, Dr. Cranston; 1st Vice, Dr. Powell; 2nd Vice, Dr. Lynch; Treasurer, Dr. Hill; Secretary, Dr. Small. The following papers were read and fully discussed:—Fracture of Neck of Scapula, Dr. Powell; Fibroid Anchylosis of Knee Joint, Dr. Grant; Hip-joint Disease, Dr. Groves; Complications of Typhoid, Dr. Chipman; Mineral Waters, Dr. Small. The next meeting will be held at Ottawa, in January.

College of Physicians and Surgeons, Province of Quebec.—Officers for 1887-89: Wm. H. Hingston, M.D., President; Dr. J. L. Leprohon and Hon. Dr. Ross, Vice-Presidents; Dr. Leonidas La Rue (Quebec), Registrar; Dr. E. P. Lachapelle, Montreal, Treasurer; Dr. F. W. Campbell, Montreal, and A. G. Belleau, Quebec, Secretaries.

Hemorrhoids.—Dr. Shuford writes to the *Med. Register*, giving the following as his method of treating hemorrhoids, with which method he has had much success:—The bowels should be well cleansed with a saline cathartic. Anoint the rectum, and with a proper speculum examine the tumors. Have ready the following preparation:

℞—Glycerole of borax or boric acid, ℥ iv.
Glycerole of salicylic acid, . . ℥ iv.
Carbolic acid (pure), ... ℥ iij.—M.

Rub thoroughly together in a mortar and let

stand until the mixture clears. Inject from 3 to 5 drops of this fluid in small, and from 5 to 8 in large tumors, as near the centre as possible, as that is the least sensitive part. The remedy injected into the tumors will diffuse itself, producing atrophy, a shrinking up and peeling off, about the fourth or fifth day after the operation, which is repeated after the eighth or tenth day, the new membranes being allowed sufficient time to toughen. This treatment is not painful and calls for no anesthetic. The patient may go about at will without added inconvenience. When the operation is well performed, in connection with other treatment indicated, it is quite as safe and effectual as the knife, ligature, clamp, or craseur. It is, moreover, attended by no pain or loss of time.

A NEBRASKA DOCTOR'S CERTIFICATE.—The following certificate, of which we hold the original, was written by a Nebraska doctor, who is famous for his cheek and cunning, and enjoys a large practice in his place, being known for a hundred miles around. The orthography is his own, also the new medical terms:

"—— ——, Sept. —.

"This is to certify, that Mrs. —— did not die with Bright's disease of the kidneys, but of a Volular Alisais of the Heart, also a gastric condition of the stomach, and Phneumonic Thyphoid, attended with a malarial base."

That is the kind of man who has a licence to practise in Nebraska, and yet the Chicago *Inter-Ocean* thinks we should have free trade between the United States and Canada in the matter of doctors.

THE *American Med. Jour.* is responsible for the following:—"At the American Institute of Homeopathy, held at Saratoga Springs June last, Dr. Jno. E. James, of Philadelphia, while discussing the therapeutics of hip-disease, said: '*Rhus.* acts best on the *right* hip, and *stram.* has remarkable control over the disease in the *left*." Dr. J. C. Morgan, from the same city, also said: '*Stram.* has proved exceedingly useful in very many cases of disease of the *left* hip.' These remarks remind us of a recent law we have seen for the determination of the sexes, deduced after the compilation and careful examination of a vast quantity of statistics: 'If the mother, while pregnant, sees a bow-legged flea with a wart on its *left* knee, the child will be a male. If the wart is on the *right* knee, a female. In case the flea is cross-eyed and lacks its eye-teeth, these indications are reversed.'" The same authority says that bitch's milk (*lac caninum*) is a new homeopathic remedy.

TREATMENT OF HEPATIC CONGESTION.—Jules Cyr gives (*Rev. de Thérap.*) the following rules for treatment of the above:—1. Application over the liver of compresses of cold water, often renewed; two or three leeches about the anus. 2. At evening, $\frac{3}{4}$ of a grain of calomel should be taken, followed the next morning by five drachms of Glauber's salts. 3. As beverage, milk and Vichy water, or 75 grains of ammonium chloride in a quart of water. A douche, while the patient is reclining, of water at a pleasant temperature, given over the hepatic region.

NUTRITIVE ENEMA.—Ewald gives (*Deutsche Med. Zeit.*), the following: Take two or three eggs and beat them up smoothly with a tablespoonful of cold water; next heat a half cup of a twenty per cent. solution of glucose with a pinch of starch, and add a wineglassful of red wine; then pour the solution of egg in slowly, taking care that the solution does not become warm enough to coagulate the albumen. Before injecting this enema, the lower bowel must be emptied by clysters.

THERE has been a dearth of jubilee honors, so far as the medical profession is concerned. Much dissatisfaction is said to be the result, not on account of the honors conferred, but because many worthy members of the profession have been ignored. Three medical men only have been informed that the Queen has been pleased to confer the honor of knighthood upon them, viz., Dr. Garrod; Dr. Aitkin, Professor of Pathology at the Army Medical School, Netley; and Mr. G. H. Macleod, Regius Professor of Surgery at Glasgow University, and Surgeon in Ordinary to Her Majesty in Scotland.

ORDINANCE CONCERNING HOMŒOPATHIC PREPARATIONS.—The *Union Médicale* states (says the *N. Y. Med. Jour.*) that a recent ministerial decree at Vienna restricts the right to dispense homœopathic preparations to those homœopathic practitioners who really observe the methods of dilutions laid down by the homœopathic school. The object of

the ordinance is to put a stop to the abuse by which, under the guise of the homœopathic preparations, all sorts of remedies have been given to patients by certain physicians.

Treatment of Piles by Dilatation.—M. Verneuil (*Gaz. deb. Hôp.*) says, that during a practice of fifteen years, he has not failed to cure piles of 6, 8, 10, 12 and 14 years duration by dilatation. The writer prefers the speculum as a means of dilatation rather than the digital method. Treatment need rarely exceed eight days in duration, four of which are to be passed by the patient in bed, and four in his room.

For Diarrhœa.—The following is recommended (*Med. Summary*) for that form of diarrhœa characterized by frequent, painless, watery discharges:

℞—Tinct. opii deod., ... ♏ xx.
Tinct. nuc. vom., ... ʒ ss.
Ext. hammamelid., ... ℥ j.—M.
Sig.—ʒ ss. in water, every 3 hours.

Ointment for Seborrhœa. — The *Med. Summary* gives the following (Bronson's ointment) for seborrhœa:—

℞—Hydrarg. ammon., ... gr. xl.
Hydrarg. chlor. mit., . . . gr. lxxx.
Vaseline, ... ℥ j.—M.

A Point in the Treatment of Chorea.—Dr. Flood (*Chicago Med. Times*) says he has very often found tenderness over the fifth cervical vertebra in choreic cases. He treats this locally by applying ether spray over the tender spot, and follows this by mild counter-irritation, this he follows by tonics and ergot.

Medical School Openings. — The inaugural address at the opening of the Session of 1887-8 at Toronto University will be given by Professor Ramsay Wright, Oct. 3rd, at 4 p.m.; that of the Woman's Medical College, Toronto, by Dr. McPhedran, Oct. 1st, at 3 p.m., and that of Trimity Medical Faculty by Dr. J. L. Davison, Oct. 3rd, at 4 p.m.

The faculties of Trinity and Toronto Medical Schools have completed a scheme by which the clinical instruction at the Toronto General Hospital will be considerably increased, each school taking an equal share in the work. This is certainly a step in the right direction.

Patellar Reflex in Typhoid.—Dr. Hughlings Jackson says he has never known the knee jerk to be absent in enteric fever, while he has found it wanting in meningitis. This may prove a valuable diagnostic sign.

Training School for Male Nurses.—Dr. D. O. Mills is about to have erected a building costing $10,000, to be used as a training school for male nurses. It will be situated on the grounds of Bellevue Hospital.

"English as she is Spoke."—It is said of Mrs. Partington, that, while gazing admiringly on St. Paul's Cathedral, in London, she expressed her emotion as follows: "O! venereal pile; gigantic stricture."

Antipyrin in Locomotor Ataxy.—It is said (*Br. Med. Jour.*) that some observers have found antipyrin of great value in the pains of locomotor ataxy. It should be given in ten grain doses in water, when the pains come on, and discontinued as soon as they abate.

Salol in Sciatica.—Dr. Aschenbach (*Med. Rec.*), has had a personal experience of the value of the above drug in sciatica. He took seven grains in the evening and fifteen grains more at midnight, with the result that he slept soundly all night and awoke perfectly free from his malady.

Mr. Savory, president of the Royal College of Surgeons, and senior surgeon to St. Bart's, has declined the knighthood recently offered him by the Queen. It is said, he was of opinion there should have been a baronetcy attached.

Sweating Feet.—Mr. Richardson writes (*Brit. Med. Jour.*), that he has cured a case of the above disease by the application of soda. He says it may be used either as a fine powder or in concentrated solution, once daily.

Provincial Appointments.—Dr. C. J. Hamilton, of Cornwall, to be an associate Coroner for the United Counties of Stormont, Dundas and Glengarry. Dr. T. D. Galligan, of Renfrew, to be an associate Coroner for Renfrew.

REMEDY FOR ASTHMA.—Dr. Woodward gives (*Br. Med. Jour.*) the following as a very excellent remedy for the paroxysms of asthma and hay fever:

℞.—Daturæ tabulæ,
Stramonii,
Can. indicæ,
Lobel. inflat., ... āā ʒij.

Mix with pot. nit. pulv. ʒij and ol. eucalypti ʒss. Burn a teaspoonful in bedroom, and repeat if necessary. The writer says the patient should at the same time observe the ordinary rules, such as going to bed on an empty stomach, keeping the feet warm, etc., without which, few remedies will be of any use.

CINCHONIDIN IN INTERMITTENT FEVER.—From extended experiments on the action of cinchonidin in intermittent fever, Dr. Legenis has come (*Archives Génér. de Méd.*) to the following conclusions:—(1) The salts of cinchonidin are as efficacious as those of quinine; (2) they may be employed in all cases in which the latter are generally used; (3) the sulphate of cinchonidin is well tolerated by the stomach in nervous persons or in those intolerant of quinine, and it does not produce either ringing in the ears, nervous agitation, or tremors; (4) they cost about half the price of quinine and its salts.

OINTMENT FOR SCABIES.—

℞.—Napthali, ... pts. 15.
Saponis virid, ... pts. 50.
Adipis, ... pts. 100.
Pulv. cretæ, ... pts. 10—M.

One application of the above is said to be effectual. No bath is required previously, and the skin is left in a good condition.

FOR CRAVING FOR ALCOHOL.—

℞.—Spts. ammon. aromat., . . . ♏ xxx.
Tinct. capsici, ... ♏ v–x.
Inf. gentianæ, ... ʒij—M.
S.—Statim.

THE BINIODIDE OF MANGANESE is recommended by Bartholow, instead of the permanganate, for amenorrhœa, as it does not so often disagree with the stomach. It should be given in two-grain pills, three times a day, and continued indefinitely.

PROTECTION FROM FLIES.—The *National Druggist* says, horses or milch cows may be protected from the stings of these pests, by washing them over with soap-suds in which a little carbolic acid has been mixed.

BERLIN is excited over the announcement that Professor Virchow has been rejected as candidate for the position of Post Rector of Berlin University. His political opinions are said to be the cause.

COCAINE IN CHOLERA INFANTUM.—Dr. Herr (*Therap. Gaz.*) has employed the above remedy in cholera infantum, in doses of $\frac{1}{6}$ grain every two hours, with the happiest results.

SOME one has said that a tooth, immersed in a solution of tincture of iron and water, one in eight, has its whole enamel destroyed in an hour. May be so.

FOR STYES.—A three per cent. solution of boracic acid, applied several times a day to styes, is said not only to cure them, but also to prevent a return.

EPISTAXIS.—M. Verneuil says (*Lancet*) that certain forms of epistaxis are to be successfully treated by counter-irritation over the region of the liver.

PROFESSOR GRAINGER STEWART states, that one-third of the samples of urine from four hundred and seventy healthy people, contained albumen.

M. PASTEUR is said to have expressed profound satisfaction witn the report of the British Committee of Investigation on his work.

A QUACK recommends smoking for the treatment of sciatica, because it is a well-known fact that smoke will cure hams.

PRURITUS ANI.—Linseed oil is said to give immediate relief in pruritus ani, when there are no rectal complications.

ONE hundred and sixty-five people died in Chicago, July 15th, 16th and 17th, from the effects of heat.

THE latest suggestion for the cure of *mal de mer*, is counter-irritation over the mastoid processes.

PEDICULI PUBIS.—One application of ether is said to be sufficient to destroy the pest.

Books and Pamphlets.

A System of Gynecology. By American authors. Edited by Matthew D. Mann, A.M., M.D., Prof. of Obstetrics and Gynecology in the Medical Department of the University of Buffalo, N.Y. Vol. I. Illustrated with 3 Colored Plates and 201 Engravings on Wood. 8vo.; pp. 789. Leather. Philadelphia: Lea Bros. & Co. Toronto: Hart & Co.

This first volume of the American System of Gynecology is an excellent work. Its appearance is equal to the best efforts of American publishers, and its contents are quite as good as its appearance. We need only mention the subjects treated of in this first volume, with the authors of the various articles, to convince our readers that the work is perhaps the best which has yet been produced on this subject. They are as follows:—"Historical Sketch of American Gynecology," by Edward W. Jenks, M.D.; "The Development of the Female Genitals," by Henry J. Garrigues, M.D.; "The Anatomy of the Female Pelvic Organs," by Henry C. Coe, M.D.; "Malformations of the Female Genitals," by Henry J. Garrigues, M.D.; "Gynecological Diagnosis," by Egbert H. Grandon, M.D.; "General Consideration of Gynecological Surgery," by E. C. Dudley, M.D.; "General Therapeutics," by Alexander J. C. Skene, M.D.; "Electricity in Gynecology," by Alphonso D. Rockwell, M.D.; "Menstruation and its Disorders," by W. Gill Wylie, M.D.; "Sterility," by A. Reeves Jackson, M.D.; "Diseases of the Vulva," by Matthew D. Mann, M.D.; "The Inflammatory Affections of the Uterus," by C. D. Palmer, M.D.; "Subinvolution of the Vagina and Uterus," by Thaddeus A. Reamy, M.D.; "Peri-Uterine Inflammation," by Richard B. Maury, M.D.; and "Pelvic Hematocele and Hematomata," by Ely Van de Warker, M.D. The above subjects are treated in a lucid, practical, and concise manner; treatment receiving a due share of prominence, a matter which will be appreciated by all practising physicians; for in some of our best works on medicine and surgery, this important part of the work is often neglected for the more scientific (?) aspects presented in diagnosis, pathology, etc.

A Companion to the U. S. Pharmacopeia; being a Commentary on the Latest Edition of the Pharmacopoia. By Oscar Oldberg, Ph. D., Prof. of Pharmacy, Illinois College of Pharmacy, etc.; and Otto A. Wall, M.D., Ph. G., Prof. of Materia Medica and Therapeutics, Missouri Medical College, etc. 2nd edition. 650 illustrations; pp. 1215. New York: W. Wood & Co. Toronto: Hart & Co.

This work is designed as a ready reference book for pharmacists, physicians and students. The botanical description of plants, the physiological action of remedies are omitted as not being of daily use to physicians and pharmacists, while the practical facts and suggestions are so arranged as to be found at a glance. The "parts by weight" of the new pharmacopœia into definite quantities by weight and measure; the medicinal properties and uses of all the medicines of which it treats, are given concisely, with doses, etc. The information given regarding hypodermic injections, inhalations, baths, etc., will be found useful. The book as a whole shows careful work on the part of the authors and will, we are sure, be useful to the profession generally, and especially so to pharmacists.

The Treatment of Neuralgia by Means of Intense Cold.—George W. Jacoby, M.D., says that we possess two refrigerants, chloride of methyl and the fluid carbonic acid, which can be easily and practically utilized in the treatment of neuralgia.

Births, Marriages and Deaths.

At Edmonton, N.W.T., on August 4th, the wife of Dr. H. C. Wilson, member North West Council, of a son.

On the 24th of August, Reginald Belt, Esq., M.D., to Emma, eldest daughter of George Hyland, Esq., both of Oshawa.

On the 14th of Sept., R. W. Garrett, M.D., of Kingston, to Minnie Louisa, only daughter of the late Alexander S. Kirkpatrick, of Kingston.

On the 14th Sept., W. O. Taylor, M.D., Princeton, Ont., to Jessie, daughter of the late Mark Tooze.

In Manitoba, August 1st, Robert Thibodo, M.D.

At Brunswick, Georgia, on the 22nd August, John Aldham Wilson, M. D., late of Kingston, Ont.

At Canon City, Colo., August 28th, 1887, Dr. Francis Nelson, formerly of Montreal.

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Original Communications.

THE BEHAVIOUR OF THE FLUID IN, AND THE PATHOLOGY AND TREATMENT OF EMPYEMA.*

BY A. M'PHEDRAN, M.D., TORONTO.

In all cases of empyema many points present themselves for decision, on which, any one who is responsible for their management, would be glad of the opinion of a meeting such as this. The difficulties in diagnosis are much greater in the child than in the adult, but even the latter often present difficulties sufficient to baffle any but the most experienced. The signs and symptoms do not maintain the uniformity which the descriptions in the text-books, especially the older ones, would lead us to suppose, and reliance on which has doubtless caused most of us much chagrin at some time in our professional experience. I well remember the case of a man of middle age admitted to the Toronto General Hospital when I was a student there, who was suffering from moderate cough, dyspnea and considerable febrile movement. The percussion note over the left half of the chest was universally flat, but bronchial breathing and bronchophony were distinct all over it. He had led a dissipated life; he was too ill to give us a history. The condition was supposed to be pneumonic consolidation. He came to the marble slab a day or two afterwards, and we found we had grievously blundered, not an unusual discovery to make at post-mortem examinations. The left pleura was distended with pus to its utmost capacity.

In children, many cases, no doubt, go through all the stages to recovery or death without there being any suspicion as to the true nature of their ailment, and that, too, in the hands of the most capable practitioners.

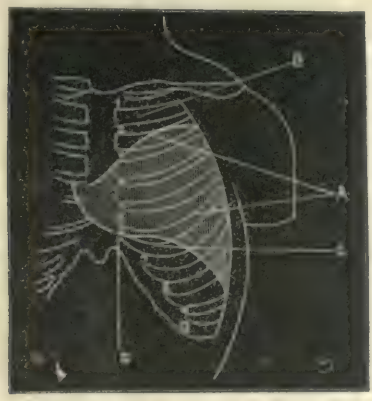
*Read before the Dom. Med. Assoc. at Hamilton, Aug. '87

Probably more than half of all cases of empyema occur in the first decade. Owing to the great resiliency of the lung in this period, small effusions cause no distension of the chest. As the effusion is poured out, the lung contracts on account of its own retractile energy, making room for the effused fluid, which thus exercises no compression on the lung; the result is exactly the same—so far as the lung is concerned—as that which would occur if an equal quantity of air were admitted. When the effusion has been considerable, expansion occurs; but owing to the great yieldingness of the chest-walls, the expansion is uniform, without bulging of the intercostal spaces and with seldom much, if any, displacement of the heart or depression of the diaphragm. Then it is all-important to remember that bronchial breathing and voice sounds persist in almost all cases in children; few of the standard works note this. Nor do the anomalies stop here. Goodhart says, "It is common enough that one draws fluid from such part of the chest as is apparently filled with air in inspiration and gives clear resonance in percussion."[1] Until recently the authorities taught that the effusion, when not circumscribed by adhesions, changed its position with the altered position of the patient, the upper margin of the region of dulness always maintaining a horizontal disposition or nearly so. Da Costa says, "When the patient lies on his face, the fluid gravitates towards the anterior chest-walls and percussion dulness posteriorly becomes far less perceptible."[2] Recent investigation, especially by Garland, Douglas Powell and others, proves that moderate effusions are immovable, maintaining their fixed position irrespective of the position the patient may assume. Gravity has no influence on them as it has on fluids in open vessels. And owing to the same causes, the upper margin of the fluid does not maintain a horizontal or water-level line, but is drawn up into a curved line, having its highest point in the axillary region. These are some of the reasons that render the diagnosis of fluid in the pleural cavity, especially in children, difficult.

The causes which occasion the accumulation of pus in the pleural cavity are far from being well understood. With many writers the opinion obtains that it is an alteration, accidental or other-

1. Brit. Med. Jour., 1887, vol. I, p. 1203. 2. Physical Diagnosis, p. 318.

wise, of a fibrino-serous effusion. Fraëntzel affirms, "In almost every case the effusion is at first fibrino-serous, and it is during the subsequent course that it becomes, sooner or later, purulent, and this may occur as early as the first week."[3] Reynold's System, Pepper's System and Quain's Dictionary of Medicine teach similar views. On the contrary, that empyema is a suppurative inflammation from the beginning and not an altered simple pleurisy, is held by many, among whom are Wilson Fox, Austin Flint and Douglas Powell. The latter says, "Unquestionably serum is more easily effused than pus, and purulent effusions are at first thin and diluted, but the pus element is from the first largely present and active in acute empyema."[4] In this early stage, while the effusion is



(From "Diseases of the Lungs and Pleuræ," by R. Douglas Powell, M.D., Lond.)

Percussion signs in case of moderate effusion. *A*, area of complete dullness ("flatness"); *B*, area of tympanitic (Skodaic) resonance; *C*, inferior curved line of tympanitic (stomach) resonance.

thin and serous, no means that we can adopt will prevent it from becoming purulent. That a fibrino-serous pleurisy may become suppurative, we know only too well, from this untoward event occurring sometimes after operative measures; but without such operative interference, it is seldom such spontaneous alteration in the character of the disease occurs. Excluding cases that arise from such obvious causes as penetrating wounds of the chest, fracture and caries of ribs, pulmonary gangrene, rupture of tubercular cavities into the pleura, phlegmonous abscesses in the walls of the chest, etc., what are the conditions then that determine a suppurative rather than a simple pleurisy in any given case? The authorities, when they refer to this subject at all, usually assign such causes as "depressed condition of system," "morbid constitutional states," "intensity of reaction," and the like; and we have been usually content to accept unquestioningly such obscure phrases as satisfactory pathological statements. In a recent address, Goodhart, in accounting for the greater frequency of empyema in children than in adults, says, "surely one cannot be far wrong in attributing it to the intensity of reaction in growing tissues to inflammatory irritation, to the rapidity with which cells grow, and to the greater sensitiveness in young life to sudden changes to their environment."[5] This expresses a very prevalent opinion as to the causation of suppurations in general and of empyema in particular. According to this opinion the causes of both kinds of pleurisy may be the same, the difference in the character of effusion being due simply to a difference in constitution. If this theory were correct, then all simple pleurisies would become purulent, were the inflammatory reaction only sufficiently acute and the constitution depressed. But it is well known that even the most severe simple pleurisies do not become spontaneously purulent, and we never expect them to; in fact, while simple pleurisy is fairly common after thirty years of age, and often characterized by the most severe constitutional disturbance, in subjects of low vitality, yet acute empyema is fortunately rarely met with at this period of life. Again, among young persons it is not exceptional to meet with cases of empyema with only moderate reaction, while in others, perhaps less robust, simple pleurisy has been attended with severe constitutional symptoms. It will thus be seen that the difference in the causation of the two varieties of pleurisy cannot be simply one of degree, but must be a difference in kind. Few English or American writers throw any light on this subject; Bristowe, Roberts, Anstie, Loomis and J. Lewis Smith make no reference to it. Donaldson says nothing more than "that there are cases in which neither local nor general conditions explain the transformation of serous into

3. Ziemssen's Cyclopedia, p. 611. 4. Diseases of Lungs and Pleura, p. 66.

5. Brit. Med. Jour., 1887, vol. I, p 1203.

*The Address on Medicine at the Canadian Medical Association at Hamilton, August 31st, 1887.

purulent effusion in the chest."[6] Flint goes further and is of opinion that all cases of empyema are due to a special cause as yet unknown. Douglas Powell is more explicit; he thinks, "we may, indeed, with some plausibility, maintain that some septic agent present in the blood renders the inflammation purulent rather than serous, as in the joint affections in pyemia, although the pus-producing quality in the blood is very difficult to estimate and would seem to be of different sorts."[7]

If we turn to German writers, we find much more definite statements as to the pathology of empyema, and it is a matter for surprise to find our radical American friends, who are usually inclined to follow the lead of German pathologists, in company with, or rather behind, the conservative Englishman, who is rather slow to accept any new theory. In Ziemssen's Cyclopedia, Fraëntzel, to account for the enormous production of pus cells in many cases of empyema, which far exceed in number all the white corpuscles of the blood, suggested that a rapid process of cell division took place in the migrated white corpuscles, and that this cell division was due to some cause hitherto undiscovered. Since then the germ theory of disease has seen almost its whole development, and its widest application is received with little reservation by the German profession generally. Rindfleisch asserts that micrococci are present in all suppurations. They are found in the pus of all acute abscesses, and, with few exceptions, in the pus of all cases of empyema. Strumpel's Text Book of Medicine, the latest work we have from the German, gives it as an undoubted fact that purulent pleurisy can only be excited by infection of the pleura with a specific virus, and his teaching is widely accepted in Germany. Eichhorst says, "It is probable also that the bacteria to which such acute diseases, as typhoid fever, scarlet fever, acute ulcerative endocarditis, puerperal fever, etc., owe their origin, exert a direct inflammatory irritation on the pleura to which they are carried by the lymphatics."[8] We know that if we keep all micro-organisms out of external wounds by appropriate dressings they do not suppurate, even if the system of the patient is depressed. If all other agencies than germs are insufficient for the development of the suppurative process in wounds, will they not also be insufficient for the development of a similar process in the pleural cavity? This leads to the discussion of the pathology of suppuration generally, which is beyond our province.

In the treatment of empyema, medicine has little to offer towards aiding us in the management of this disease; but, the development of aseptic surgery has done very much in lowering the mortality rate, and not only so, but also in effecting such cures as are satisfactory alike to patient and surgeon. Instead of "generally proving fatal," as Trousseau mournfully remarks of this disease in his time, the results, in the experience of doubtless not a few present, have been uniformly favorable as to life, and fairly so, as to the completeness of the cure. In the past, as now, in a few cases the pus was absorbed, leaving no evil effects; in some others, in whom the pus found its way into a bronchus, and a smaller proportion still of those in whom it found exit by perforation of the chest-wall, recovery ensued; nearly all others died, operative interference being almost necessarily fatal and therefore scarcely justifiable. In our day the conditions are reversed; it is in the *retention* of pus in the body, not in its *evacuation*, that dwells the danger; so that on the discovery of pus in the pleural cavity, our imperative duty, with rare exceptions, is to remove it. If the effusion be large the removal must be prompt, irrespective of the condition of the patient, since large effusions—even in patients apparently suffering but little from them—are liable to a sudden fatal termination.

In what cases is it advisable to delay interference? The most common are those in whom perforation of a bronchus has occurred and the pus is being expectorated; some of these recover in fair time without operative aid. Godlee, of Brompton Hospital, specifies the following also:[9]—1st. Cases of chronic phthisis in whom the presence of pus may apparently be doing no harm for a considerable time, but its evacuation may be followed, apparently as a result, by increased destructive changes in the lungs. 2nd. In a class of tubercular cases, where the empyema is in direct communication with a bronchus and the patient suffering

6. Pepper's System of Medicine. 7. Ibid.
8. Diseases of Lungs, etc.

9. Lancet, 1886, vol. I, p. 95.

but little inconvenience. In all other cases active measures are necessary, and two methods present themselves for our consideration, viz., aspiration and free incision. In what kind of cases is aspiration to be recommended as a rational means of cure? There is no doubt that a certain proportion of cases recover after one or more aspirations, but these successes are confined to children only; these cases, it is well to bear in mind, would be also the most favorable subjects for free incision. Even in children, aspiration seldom succeeds, except when the effusion is localized. Of 120 cases of empyema in children, collated by Dr. Holt, of New York,[10] only 21 were cured by aspiration, and in all but one of these the effusion was localized. These would probably have recovered even more rapidly by free incision, so that all they gained was the escape from the inconvenience of an open wound and the applications of dressings. Aspiration should therefore be confined to those cases in which the pus is slowly effused or localized; the process may be repeated if, after the first aspiration, the pus re-accumulates slowly, is more serous, and quite inodorous; a second aspiration should be done before much fluid accumulates to injure by distension any adhesions that may have taken place. If the results of aspiration are not satisfactory, free incision should be promptly resorted to, because of the liability of the lung to become permanently contracted by formation of adhesions and cicatricial thickening of the sub-pleural tissue. Many do preliminary aspiration in all cases, even if they have little hope of any good being done. This is unwise, not only because there is loss of time and increased liability of permanent contraction of lung, but also because, as Dr. Clifford Allbutt first pointed out, hectic fever often develops after aspiration. In all adults, and in the majority of children, the aspirator is of use only as an instrument of diagnosis, not of treatment.

In using the aspirator, the greatest care should be taken that all is done with strictest antiseptic precautions. The part to be punctured, the operator's hands, and the aspirator should be thoroughly cleansed and rendered aseptic. Before introducing the needle, it and the attached tube should be filled with antiseptic fluid, in order to pervent the possibility of the entrance of air containing any septic particles.

10. Med. News, June 4th, 1887.

Having determined that free drainage is necessary, where should the incision be made? what anesthetic used? what antiseptic precautions are to be taken? what is the best method of drainage? Is the pleural cavity to be washed out in any, or all cases? In what cases is excision of ribs necessary, or advisable? What additional means are to be adopted in chronic cases? These are all questions deserving of our most careful consideration. My time will allow me to touch briefly on only a few of them.

Some, with Marshall, advise that the opening be made well forward, near the sternum, in the 4th or 5th interspace, the usual seat of spontaneous perforation, on account of the thinness of the chest-wall here—there being but little muscular covering. Some, again, believing that drainage is best attained by making the opening as low as as possible, as tapping a barrel low down best empties it, make the incision well down below the angle of the scapula. The majority of writers, however, recommend about the 7th or 8th interspace, near the posterior fold of the axilla, as on the whole giving the best results. This point affords ample facilities for drainage in recent cases, and is not liable to be occluded by the upward and outward pressure of the diaphragm. Just how, so high an opening drains the lower part of the pleural cavity is difficult to explain, but it is no doubt due to the elasticity of the lung and chest, and the upward pressure of the diaphragm. In making the opening, the liability of puncturing the diaphragm is a possible accident always to be borne in mind. It has occurred in several reported cases, in one of which the incision was made in the 6th interspace.[11] The accident is owing to the diaphragm being elevated and adherent to the chest-wall, instead of being depressed as usual. It is therefore advisable always to explore with the aspirator, to satisfy ourselves of the existence of pus, before making an opening; at the same time remembering that the needle may give negative results, on account of the thick consistency of the pus, or the occlusion of the needle by fibrinous deposit.

What anesthetic are we to use? Chloroform is safer than ether in this disease, both are probably more dangerous than in most other diseases. For the adult, general anesthesia is seldom required,

11. New York Med. Record, 30th Sept, 1886.

the local injection of cocaine, or the use of the ether spray being sufficient. In children, chloroform is fairly safe in uncomplicated cases, and I think its administration is to be advised in almost all cases, even for aspiration; for the terror excited in children by any of these operative procedures is probably nearly as dangerous as chloroform anesthesia and certainly much more disagreeable.

What is the best method of drainage? On this opinions differ, but the majority favor a rubber tube one-quarter or one-half inch in diameter, and only sufficiently long to enter the pleural cavity. If the interspace is not wide enough to admit it easily, a portion of rib had better be excised to allow the free insertion of the tube at times of dressing; in this way the dressings are much less painful and the drainage much more perfect. Many practitioners prefer drainage by syphonage to the open free drain, and they have had the most gratifying results by that method. I am not prepared to offer an opinion on the relative merits of the two methods, as I have had no experience with the syphon; but many who formerly advocated and used it exclusively, have now discarded it for the open drain, with strict antiseptic measures. It is very important that the tube be removed as early as possible, as its presence is sufficient to prolong the discharge. In few children is it necessary to retain it longer than about two weeks, in some a few days suffice; in adults it must be retained until the discharge is almost completely dried up. If the tube be removed too early, the temperature will soon indicate the necessity for its re-introduction.

Shall we wash out the pleural cavity? There is room for dispute here. Writers with few exceptions answer this in the affirmative, though most of them admit that the proceeding is not devoid of gravest danger. In the treatment of purulent collections in any part of the body, the first requirement is to give free vent to the pus and prevent the retention of any part of it. To do less is repugnant to true surgical instincts. If this is done and suitable antiseptic dressings applied, nothing further will be required in any acute suppurative process. Any meddling with the cavity can do no good, but will probably do harm by interfering with the union of opposing surfaces or the organization of granulations.

Empyema is but a pleural abscess, peculiar in having a more or less rigid outer wall, a yielding elastic inner one and close relations with vital organs that are very susceptible to impressions. In the treatment of empyema if we secure perfect drainage and complete antisepsis, we have fulfilled our duty and a cure will soon result. If we fail in these objects the results will be imperfect, and the usual course is to endeavor to make up for the deficiency by the use of antiseptic washes to remove residual pus and correct or mitigate its septic properties. While collections of pus in the liver, large joints, the peritoneum, or even the brain, may be washed out almost with impunity, similar treatment of pleural collections is attended with grave dangers, and death is liable to result unexpectedly during or after the operation. The death roll from this cause is a large one. In all the fatal cases reported, the unpleasant symptoms have occurred only after repeated washings, always during the entrance of the fluid, but never during the first washing. The most frequent cause of these sudden deaths is probably syncope, due to the suddenly increased pressure or reflex disturbance.[12] Sudden withdrawal of large pleural effusions may have a similar effect by lessening pressure and allowing rapid dilatation of the auricles. In some cases the injected fluid causes occlusion, by its pressure, partial or complete, of the vena cava inferior; such a case occurred to Fraëntzel. Another cause of sudden death is cerebral embolism, from clots loosened in the veins of the lungs, by increased pressure. Some substances as sodium salts, nitric acid, chlorine, are poisonous to the heart and should not be used under any circumstances. Fluids used too hot or too cold may have equally disastrous effects. In view of these dangers, it is quite evident that washing out the pleural cavity should not be done as a mere matter of routine, a practice which, were it even not dangerous, is wholly unnecessary. We should not resort to it, when it is feasible to pursue the more rational method of enlarging the opening in the chest, by resection of ribs, for the purpose of free drainage and removal of fibrinous deposits with curette or other suitable means. It is in the highest degree reprehensible, under any circumstances, to distend the cavity with a view of ascertaining its capacity. Lastly, if washing out the cavity is necessary, it should not be entrusted to an unqualified assistant. Instead of washing out the cavity, some have tried the insufflation of disinfectant powders, especially iodoform, with fairly satisfactory results.

12. Medical Chronicle, Aug., 1887.

ADDRESS ON OBSTETRICS BEFORE THE CANADIAN MEDICAL ASSOCIATION.

BY F. R ECCLES, M.D., LONDON, ONT.

Animated by a desire to promote the interest of this Association, and feeling the obligation which rested on me as a member thereof, I consented to open the discussion in the department of obstetrics and gynecology. Soon thereafter I recognized the responsible position in which I had placed myself, and began to sorely repent my rashness. But the consciousness of the liberal-mindedness of the members of the Canadian Medical Association assured me that in an honest endeavor to discharge a self-imposed duty, I need not look in vain for their kind indulgence.

I was anxious to present to this Association some subject in connection with this department which would not only be interesting to the specialist, but to the general practitioner as well, as the general practitioner largely prevails in this young country of ours. I have therefore selected so commonplace a subject as *Subinvolution of the Uterus*, not more on account of the frequency of its recurrence and the not unfrequently more or less unsatisfactory results of treatment, than the personal desire to obtain the views as well as the experience of a great number of those present. And even if the observations, clinical research and line of treatment of so many here, who are more competent to speak upon this subject than I am, shall not bring out any great advance, I shall nevertheless not regret the introduction of the discussion. If no new remedies are brought forth, no specially different lines of treatment are advocated, still if we catch the inspiration to the proper use of remedies well known, I venture to say that the time is not misspent. Because of the prevalence of this affection, so much the more has it enjoyed the mind of the general practitioner, and in many instances is looked upon as the opprobrium of an art. "Sir, thou hast nothing to draw with, and the well is deep." I use the term "subinvolution" in preference to any other name, such as areolar hyperplasia, chronic metritis, etc., and for two reasons. It conveys in its meaning a fact that there has been an arrest or retardation of all those normal and physiological changes which are embraced under the head of involution, and secondly, one is free from those mists and obscurities, those suppositions and hypotheses, where an honest endeavor to give a name according to the pathological condition of the parts obtains. For one hears of areolar hyperlasia, chronic metritis, hypertrophy of the uterus, sclerosis of the uterus, chronic parenchymatous inflammation, or chronic corporeal parenchymatous inflammation, diffuse proliferation of connective tissue, diffuse interstitial metritis, etc., etc., all of which indicate to the thoughtful student that further elucidation of the nature of the pathological changes of this condition may yet be expected.

As eczema in its early stages differs from eczema in its later stages, and as the pathological conditions of hepatic cirrhosis in its early stages differ materially from those noticed in the later stages, so we often find the subinvolved condition of the uterus frequently presenting variations consequent upon the duration of the ailment, although I believe this is not invariably so. For this reason, more than from natural conservative tendencies, I would retain the old familiar term "subinvolution."

We understand by this that there has been a failure to undergo sufficient reduction in size after delivery or abortion. I infer that something has prevented the ordinary changes incident to the retrograde metamorphosis from taking place, which in the short space of six or seven weeks reduce a uterus of 24 ounces to two ounces. Nature intends a proper and rapid reduction of this organ. How, then, is it that we have this ailment occurring so frequently? That there are known or unknown causes—avoidable or unavoidable—which prevent involution, will not be denied. The art and science of medicine are not only to relieve symptoms and remove morbid conditions, but to worthily stretch out into other and more philanthropic fields; and now in all civilized countries preventive medicine is occupying a prominent place.

After delivery, gradual diminution of blood supply and an increasing activity of the processes of absorption bring about involution of the uterus. But amidst unfavorable circumstances, the ordinary retrograde metamorphosis undergoes some departure from health.

I shall endeavor to present to you some of those unfavorable circumstances or influences, the prevention of which will largely contribute towards

the normal involution of the uterus. And first amongst those unfavorable influences is fever. An elevated temperature, whether it be from specific fever or septic causes, or inflammatory changes, interferes with general nutrition, and to a marked extent is this the case with the uterus following parturition. Recall to your minds some of the peculiarities of the muscular tissue, of which the uterus forms a good example. Arrest of the function is followed by little or no atrophy, whereas exaggerated action leads to hypertrophy to a marked extent. Irritation of the nerves supplying these muscles has less influence on the contraction of their fibres than direct excitation of the muscles themselves, and regeneration of their fibres takes place rapidly; in marked contra-distinction to the voluntary muscles, the structure of which is not easily restored. In reference to the uterus itself, there is no organ in the body which so readily responds to irritation. The presence of a myoma deranges its vascular supply and leads to hypertrophy. So will a contracted os or a flexed cervix, because resistance is offered to the passage of the blighted elements of the lesser reproductive process. Pregnancy so stimulates the nutritive activities, that an organ of 12 or 14 drachms increases to twice as many ounces during the short period of a full utero gestation, while the inverse process is accomplished in the marvellously short period of six or eight weeks. Our attention should therefore be directed to the uterus in all cases where fever has occurred during the puerperium; *very frequently we will find arrested involution.* Then inflammatory attacks occurring in the body or neck, or in immediate connection with the uterus, as in pelvic peritonitis or cellulitis, may be looked upon as unfavorably influencing retrogression; these are the cases in which one may expect to find subinvolution present.

A lacerated cervix or a lacerated perineum, or any serious injury to the vagina, is more known to arrest involution, not only of the uterus, but of the vagina often.

Then there are cases of general debility—impoverished blood—an enfeebled and disordered state of the nervous system, where the nutritive processes are below par; where there is muscular atony, and consequently but feeble rhythmical contraction of the uterus. In all these cases, one almost invariably finds involution retarded. And these are the very cases where the mother is considered unable to nurse her child; and consequently the stimulus to reflex action, which is an important factor in the production of uterine contraction, is lost—a not unimportant point to remember in all cases of abortion. The retention of any portion of the secundines, displacements, prolapses and flexion, keep up a state of hyperemia which interferes with involution. My experience, however, leads me to believe that displacements are more frequently the effect than the cause of the ailment. The weighty uterus is not so easily steadied, and hence topples over, and generally in the backward direction, perhaps being first influenced in that direction by a distended bladder. Other unfavorable circumstances influencing involution are post-partum hemorrhage, neglect to empty the rectum once in 24 hours, a too early resumption of the upright position, or any local cause whatever productive of venous obstruction. With the knowledge of all these circumstances the physician stands as sentry on guard, and who can say in how many instances disease has been averted, and the physiological changes incident to involution have gone on without let or hindrance. The prevailing idea amongst the laity that the patient should be up and about on the ninth day is productive of no little harm. At times it requires considerable firmness on the part of the physician to break down these old-time prejudices. I look upon too early getting up of etiological importance in connection with subinvolution.

There are certain accidents which frequently occur in connection with the subinvolution. For instance, a subinvoluted uterus is liable to prolapsus—liable to displacement. Indeed I very frequently find, with subinvolution, retroversion or retroflexion, or both, with the ovaries dragged down, enlarged and tender; and in not a few instances I have been enabled to detect a varicose condition of the veins of the ovary. In the majority of cases, these are results of subinvolution—conditions which, although relieved, are liable to return after subsequent pregnancies. Hypertrophy and elongation of the cervix are often present.

As far as symptoms are concerned, I think it almost impossible to determine that subinvolution exists. Indeed there are no pathognomonic symptoms, and there are many symptoms in common

with other uterine diseases. If there is one symptom to which I attribute more importance than another, and one which more frequently occurs, it is the sense of pressure on the top of the head, just about the position of the anterior fontanelle. Some patients speak of a burning pain there, others as if they wanted to press their head against something, while others will tell you of a sensation there so unbearably distressing that they believe they will go crazy. This is a symptom I have noticed as being not unfrequently present. I do not remember this as a symptom denoted by any author, but it is one I have recognized for the last fifteen or sixteen years. Oftentimes the patient consults you only on account of the headache, and will tell that it is not at all like the headache from stomach derangement, neither is it like neuralgia, but incomparably more unbearable than either. Then in old standing cases, where the headache of this character has been more or less persistent, there comes in the current of the history fits of melancholy, and, indeed, the patients will volunteer the statement that her usual jollity has given place to irritability, by which she really means mental depression. Close observation will often detect an anxious countenance. Catching this anxious and frequently sallow countenance, I often feel pretty certain of my diagnosis before the patient is rightly seated in my consulting-room. With many of these poor women how wearily the day passes, and without a ray of sunshine to brighten their path. To make better their body—to cure them of their ailments is really to regenerate them —is to change a saddened countenance into one expressive of gratitude beyond any pecuniary consideration.

Now a great deal has been written about mental depression and tendencies to insanity in cases of laceration of the cervix of long standing, but I have frequently seen the same symptoms in subinvolution, unaccompanied by any laceration. When you cure the subinvolution, whether it be accompanied or unaccompanied by a lacerated cervix, you cure the melancholy and headache as well, and in general all the other symptoms. But some of these cases cannot be cured with any medicinal agent, either by internal administration or local application, but by some operative procedure, of which I will have occasion to speak. Recent subinvolution will always be characterized by more or less menorrhagia, and in not a few instances those also of long standing. The inference from a clinical standpoint is that the condition of the uterus in those latter cases always remains much the same. One who has at all carefully observed his cases of subinvolution will have noticed some of long standing, which, aside from the history, would appear to have been cases of only recent date, cases in which the uterus, body and neck, still remains soft and large, while others present the sclerosed condition, in which the menstrual discharge becomes scanty. Upon examination, we often find a patulous os and open canal, with considerable enlargement of the uterus. The enlargement is evenly distributed and is readily made out by the bimanual method and confirmed by the sound, which may pass from three to five inches. Excluding pregnancy and abnormal growth, the enlargement in conjunction with the history will seldom fail to establish the diagnosis. There is in general an increased sensitiveness about the uterus, more noticeable when you endeavor to raise the uterus up than when you press upon it from above; and more especially is this the case if the uterus be retroverted or retroflexed. In all such cases dispareunia is a prominent symptom; unrest and an aggravation of symptoms follow cohabitation. I am always suspicious of retarded or arrested involution, where the history of illness dates from labor (either at full term or premature), where it is accompanied by menorrhagia, and especially if menorrhagia occur during lactation. Whatever may be the direct cause, I suspect involution. Then I confirm my suspicions by a diagnosis made negatively; that is, as far as possible, by eliminating the possibilities. Careful physical examination, with the information already obtained, will in general clear up all doubts about the case. In a few cases we find that the menstrual flow, from its first re-appearance, is scarcely beyond the normal, and yet there is marked subinvolution. It will generally be observed in these patients that lactation exercised a sufficient influence to prevent menstruation until some nine or ten months after the birth of the child. I have a patient under my care now (who recommenced menstruation when her child was nine months old, and who continued to nurse the child for five months longer), in whom menstruation has been normal since its first re-ap-

pearance, now some fifteen months ago, and yet her uterus in large and heavy, measuring quite 3½ inches. In the great majority of cases it is not so, and in recent cases of subinvolution more or less menorrhagia may be looked for.

The treatment of subinvolution differs materially according to the conditions present. When one finds the uterus enlarged, soft, and relaxed, feeling very much like the uterus in the second month of pregnancy, it is noticed that this condition responds very readily and promptly to treatment. The chlorate and bromide of potassium, with ergot and quinine, are amongst the most useful remedies. Two grains each of ergotine and quinine, given three times a day, with 25 or 30 grains of bromide of potassium at bed-time, will in general promote involution. It will be materially aided by douching the cervix with a gallon of hot water night and morning, to the last pint of which I generally add one drachm of borax or alum. If the recovery is not prompt and the cervix looks congested, I scarify it, make applications of iodized phenol or Churchill's tincture of iodine to the endometrium at intervals of ten or twelve days, painting the whole vaginal cervix at the same time. I do this whether endometritis be present or not, and I am satisfied involution is promoted thereby.

It is unnecessary for me here to mention that any displacement should be rectified as soon as possible, as I have before intimated that this accident superimposes an additional element of venous congestion. But when the condition of the uterus becomes altered, and we recognize hardness of tissue, we find a more obstinate resistance to treatment These are the cases which have run on for months and even years with little or no treatment, beyond tonics and laxatives; and these are the cases in which we find extraordinary nervous symptoms developing themselves. Unfortunately a number of those cases will never fully recover, but their condition may often be so ameliorated that they may pass the years to the menopause with comparative comfort. In addition to the line of treatment which has just been advocated, and which must be carried out very vigorously, I am in the habit of applying nitric acid to the whole endometrium, after the manner of Atthill, when the carbolic acid, iodized phenol or tincture of iodine fails to produce a healthy condition of the mucous membrane. The application of the various caustics has a two-fold purpose—*to establish* a healthy condition of the mucous membrane, and *to whip* the uterus into contraction. Undiluted carbolic acid is a very safe and almost painless caustic, if care is exercised in not allowing any to trickle down into the vagina. If after a satisfactory trial of this treatment no very marked benefit be produced, I have tried dilatation of the whole cervical canal to the extent of an inch or more, endeavoring in this manner to produce a strong impression upon the uterus. In one case in particular I believe I obtained much good. As this is an operation not fraught with much danger, it can readily be tried in obstinate cases. But I can recommend with much more hope of success, removal of a portion of the cervix. In a number of my early trachelorrhaphies, I was surprised to find what a marked impression was made on the nutritive activities of the subinvolved organ. In one of my first this was especially noted. The uterus was large, retroverted, somewhat prolapsed, and the cervix lacerated into three sections, and the symptoms of backache and dragging pain were so unbearable that the poor woman had been an almost helpless invalid for three years, with all the nervous symptoms which accompany such a condition. In addition, there was a laceration of the perineum almost back to the rectum. In this case I was associated with Dr. Edwards, of London, and operated April 24, 1881. The uterus rapidly diminished in size, and the woman bloomed into health in a manner wholly surprising to her friends and medical attendants. In a short time after her return home, she attended to all her household duties connected with a farm, and in a letter to me some ten or twelve weeks afterwards, refused to come back to have the perineum repaired, saying, "as long as I feel as well as I do now I will not have the other operation done." Diminution in tenderness was as marked as diminution in size. As I mentioned, the cervix was lacerated into three segments, one small and two large. The small segment was entirely cut away and the operation thus converted into a bilateral one. I was strongly impressed, aside from the mere stitching up and healing of the cervix, that the operation should have produced such an impression upon the uterus as to start up afresh the nutritive activities which had

been arrested some four years previously, and thus involution was brought about.

Another case of subinvolution without any laceration of the cervix, in which I was associated with Dr. Fraser, of London, in which the uterus was so large and the menorrhagia so profuse, that some considerable doubt was expressed as to whether there might not be a fibro-myoma in the walls of the uterus. The patient was much exhausted from repeated periodic hemorrhages and was incapacitated for work. She had the best of treatment, both constitutionally and locally, but with only temporary benefit. I saw her on Oct. 16, 1884 (uterus then $4\frac{1}{2}$ inches), when we agreed that removal of the cervix would afford the best chance of recovery, might wake up the uterus, as it were, and accordingly on November 8th I removed it with the écraseur and scissors, using the Paquelin cautery to restrain the hemorrhage. It was completely healed in four weeks, and the improvement in the general condition was uninterrupted. The menses became regular both as regards time and quantity, and has remained so up to the present time. I asked Dr. Fraser to examine the uterus, which he very kindly did on the 29th inst., and his report is that the body of the uterus is normal in size (measurement $1\frac{3}{4}$ inches), menstruation normal, and her general health good. It will be remembered that she had a long course of treatment, of applications of caustic to the uterus, ergot, quinine and strychnia, etc., and with little or no benefit. No treatment except tonics after the removal of the cervix, and the improvement commenced at once.

Every one who has had any experience in gynecology can bear witness to the evident improvement of the subinvoluted condition of the uterus after what has been called Emmet's operation, now known as trachelorrhaphy. Dr. Emmet himself says: "For many years past I have met with few or no cases of subinvolution which were not due to laceration of the cervix." And again he says: "If the operation be performed after the different sources of irritation have been removed, the uterus will be reduced rapidly in size, and the patient will not only regain her health, but will remain in the full enjoyment of it afterwards." One hesitates in differing from so good and excellent a man as Dr. Emmet—such a careful observer, and one in whom wonderful results have been the outcome of *such careful observation*. But I do not believe that *complete recovery* will occur in every case, at least such has not been my experience; but that in the great majority of cases similar results *will follow*—the involution will take a fresh start and become completed. But that there are cases of subinvolution in which there has been no laceration of the cervix, and in which the improvement has not been satisfactory under the usual treatment, I question if any one here will deny.

Just as in some cases of enlargement of the tonsils in children—you improve the general health, pay careful attention to the function of the skin, kidneys and bowels, endeavor to correct faulty nutrition, apply topical applications to the tonsil, use frequent compression of the gland between the fingers, and still the gland diminishes very little in size. But while the health is in the best possible condition, if you remove a small portion of the most prominent part of the tonsil with the tonsillitome, it appears to start up a new condition whereby absorption takes place and the enlarged tonsil gradually melts down. In a similar manner, with my limited experience, a removal of a portion of the cervix in obstinate cases of subinvolution produces like results. The operation surprises the uterus; increased nutritive activities result, and involution is set up.

When I was in Europe in 1876, '77 and '78, it was quite the fashion in some hospitals to cauterize the cervix deeply with caustic potash in enlargement of the cervix with subinvolution, but the subsequent contractions in the cicatricial tissue have, I believe, justly made the operation unpopular. It was the impression made on the uterus by the powerful effect of the escharotic that produced a revulsive action on that organ.

In some cases wedge-shaped sections have been taken from the cervix with good results, not only to the enlarged cervix, but also to the uterus itself, and, as I said, in a few cases I have had fairly good results from dilatation. In that very excellent work of the late Dr. John Thorburn, of Manchester, whose untimely death took place while his work was going through the press, he quotes from his colleague in reference to the operation on the lacerated cervix, and says "that the operation must often be looked upon as merely a step in the course of treatment of a uterine disease," a statement with which I am fully in accord. Any

operation on the cervix for the promotion of involution must only be looked upon as a means to an end. It is all-important, therefore, that the system should be put into the best possible condition. Local and constitutional treatment must join hands, otherwise we will be frequently disappointed. In defective nutrition the uterus suffers in common with other organs, and this alone greatly predisposes to arrest of involution.

BISMUTH IN INFLAMMATORY AFFECTIONS OF THE INTESTINAL MUCOUS TRACT.

BY A. C. GAVILLER, M.D., GRAND VALLEY, ONT.

In a case of acute dysentery which came under my care lately, I gave bismuth tris nitrate and opium as the medicinal treatment, in doses of fifteen grains of the former to one grain of the latter, every two or three hours. The symptoms became no worse but did not improve, so I doubled the dose of bismuth and continued the opium as before The pain speedily became worse and finally agonizing, after about twenty-four hours' treatment with the increased dose of bismuth. The evacuations became excessively frequent and of a garlic-like smell, while the same odor was readily perceptible in the breath. Thinking the bismuth might be impure and contain arsenic, I changed the treatment to plumbi acetat. grs. ij., opium gr. j., every two hours, with rapid improvement in pain, speedy fall of the temperature which had been rising rapidly, and a rapidly lengthening interval between the stools, which, with the breath, soon lost their garlic-like odor.

In twenty-four hours the motions had diminished to one in six to twelve hours, and the pain almost disappeared as long as the medicine was continued. I then gave pulv. kino co., grs. xx., every 2-3 hours and continued it with lengthening intervals until convalescent. I now wrote to Messrs. Lyman Bros., of Toronto, from whom I had procured the sample of bismuth which I had been using, and stated my suspicions as to its purity and the symptoms of irritant poisoning produced by it. They promptly submitted some of the bismuth from which mine was taken to Prof. Hays for analysis, who found no arsenic; the only impurities it contained being traces of iron and lime. I may state that the bismuth was of Howard's manufacture, a name which is considered a guarantee for purity. Nor could the bismuth have become contaminated with arsenic after I received it from Toronto, as I kept it in a bottle which had contained only bismuth for years. This case is instructive as it shews:

1st. That bismuth may become soluble in the intestinal canal, probably through chemical combination with the sulphuretted hydrogen so commonly found as a result of the decay of albuminous foods or dysenteric stools, which usually contains more or less (in bad cases considerable) albuminous material, through chemical change a sulphur and a hydrogen compound are formed, the former giving the dark color so often observed in the stools of patients taking bismuth, and the hydrogen giving the garlic-like odor to the stools, and by absorption into the circulation and inhalation by the lungs, to the breath also.

2nd. That bismuth, when so changed, acts as an irritant to the mucous lining of the intestines.

In these points a similarity to arsenic is shown, a similarity at which we need not be surprised when we view the close chemical relationship existing between the two metals.

The practical point that I would adduce is this: use bismuth with caution in active inflammatory affections of the intestinal tract, where rapid chemical and fermentative change is going on, as where the changes which render the bismuth poisonous are most readily effected.

Correspondence

To the Editor of the CANADA LANCET.

SIR,—In reading, not long ago, I came across the following professional aphorisms of Amédée Latour, which are sufficiently curious and shrewd to merit reproduction. I have endeavored to make the translation as literal as possible:

1. Life is short, patients fastidious and the brethren deceptive. 2. Practice is a field of which tact is the manure. 3. Patients are comparable to flannel, neither can be quilted without danger. 4. The physician who absents himself runs the same risk as the lover who leaves his mistress; he is pretty sure to find himself supplanted. 5. Would you rid yourself of a tiresome patient; present your bill. 6. The patient who

pays his attendant is but exacting, he who does not is a despot. 7. The physician who depends on the gratitude of his patient for his fee, is like the traveller who waited on the bank of a river until it finished flowing so that he might cross to the other side. 8. Modesty, simplicity, truthfulness! cleansing virtues, everywhere but at the bedside; there simplicity is construed as *hesitation*, modesty as *want of confidence*, truth as *impoliteness*. 9. To keep within the limits of a dignified assurance without falling into the ridiculous vauntings of the boaster, constitutes the supreme talent of the physician. 10. Remember always to appear to be doing something—above all when you are doing nothing. 11. With equal and even inferior talent the cleanly and genteely dressed physician has a great advantage over the dirty or untidy one.

Yours, etc.,

ARTZ.

OUR NEW YORK LETTER.

From our Special Correspondent.

DR. GIRDNER'S TELEPHONIC BULLET PROBE, WITH CASES.

NEW YORK, Oct. 18th, 1887.

The telephonic bullet probe, and induction balance, are two cleverly constructed little instruments for locating any metallic substance in the human body, and designed by Dr. Girdner, of this city, who, with the help of Prof. Bell of telephone fame, has perfected what bids fair to be an invaluable instrument in general, and particularly in military surgery. The induction balance is constructed on the plan that,—should perfect balance be established between primary and secondary currents from a battery, there will be perfect silence in an ordinary telephone receiver attached to the secondary current, and so the instrument is made up of these parts,—first, there is an ordinary six cell battery, to this is attached a rheotome which interrupts the current, which then goes to a coil, part of the adjusting coils, and then to another coil, part of the exploring coils, and then back again to the battery; this makes the primary interrupted current. The secondary current is generated by coils, one making the second coil of the adjusting coils, and the other forms the other half of the exploring coils. The wires from these are attached to the telephone receiver and make the secondary current. Now, if the exploring coils are perfectly balanced there is silence in the telephone, but if they are brought within three or four inches of any metallic substance, the balance is disturbed and a sound produced. To keep them perfectly balanced they are imbedded in paraffin in a wooden block with a handle, convenient to move about any part of the body. The adjusting coils are merely to check and adjust the exploring coils. To detect the foreign substance, the telephone is placed to the ear and the exploring block is gently passed over the suspected parts, and as soon as it comes near the metal there is heard a high pitched musical sound, gradually increasing until it is heard at its maximum at a spot directly over the foreign substance; this spot is called the *sonorous spot*. The sound is characteristic, and there can be no doubt that you are very near some metallic substance. You can count the nails in the floor or table with it, or discover metal anywhere within three and a half inches. And now, after finding the sonorous spot, the telephonic probe is brought into play. This is made up of a piece of flat steel, moistened and laid on the surface near the sonorous spot, to this is attached a wire, the other end of which is attached to any telephone receiver, while the probe or exploring needle is attached to the other knob of the telephone by another wire. Now it is complete. The tissues of the body form the battery fluid, the steel plate one element of the battery, the foreign metallic substance in the body the other, and when the probe or needle is thrust in at the sonorous spot, and comes upon the metal, a circuit is established, and there is a sharp "click" heard in the telephone. Touching bone or tissues has no effect upon it, so when the click is heard you know your probe is touching a metallic substance. Dr. Girdner has been experimenting for the last two years, and has relieved many an old army veteran of his interesting but painful memento of his soldiering days. It is merely an interesting coincidence that Nélaton's probe was invented to locate a bullet in the ankle of the great Garibaldi, while one of Dr. Girdner's first cases was to locate a bullet in the ankle of a colonel, received in the battle of Chancellorsville. Dr. Girdner has given me leave to quote some of his cases, which I shall append in his own words, as published in the *N. Y. Med. Journal*, of September 17th:

Case III.—A young man received a pistol-shot wound in the right arm, the ball entering about the point of insertion of the deltoid muscle. This patient was under the care of Professor William T. Bull, by whom I was invited to examine him a few days after the accident happened. Exploration of the arm and axilla with the induction balance gave negative results, but when the coils were brought over a point on the top of the shoulder in front of the origin of the deltoid and about the junction of the acromion process with the spine of the scapula, a response was had in the telephone which was distinct and heard by several medical gentlemen present besides Dr. Bull; pressure also over this spot caused pain. The patient told me that as he saw his assailant approach from the front prepared to shoot, he turned his right side to him and threw up his right forearm on a level with his eyes, and thus the bullet, which would otherwise have struck the face or head, was received in the attachment of the deltoid, and the bullet, following its horizontal course, would naturally traverse the entire length of the deltoid while the arm was held in this horizontal position. The shoulder-joint not being involved and the patient's general condition being so good, it was decided not to do an operation for the removal of the bullet, and the patient recovered shortly, still carrying the bullet in his shoulder.

Case IV.—A man, aged forty-four years, received a bullet in the right ankle at the battle of Chancellorsville. I quote from a copy of the history of the case furnished me through the kindness of Professor T. M. Markoe, whose patient he was, and by whom I was invited to examine him.

"Right ankle is much enlarged and tissues about it thickened and indurated. The lower ends of both tibia and fibula show increased size and involucral action; movements of ankle-joint limited owing to surrounding enlargement; one inch and a half above tip of external malleolus is a sinus which discharges a small amount of pus daily and admits a probe the distance of one inch and a half in the direction of the centre of the limb."

When an ordinary silver probe was passed into this sinus, its walls for a greater part were found to be composed of dead bone, and the bottom of the sinus everywhere communicated to the hand the presence of dead bone or some hard substance, and no man could tell certainly if it were lead or dead bone which he was probing, or if indeed there was any lead at all in the wound, a condition of things such as, I am informed, inspired Nélaton to devise the porcelain probe. The Nélaton probe was next introduced, but no staining of the porcelain could be found, nor was this surprising, since the bullet had lain in its present position in the tissues for twenty-four years, and, as was shown on its removal was thickly covered all over with a coating of lead salts, so that the porcelain could not be stained by the metal.

The telephonic probe was now introduced, and after probing a hard substance for a while, which was bone, without response, the bullet was struck, and a loud distinct "click" was heard in the telephone, announcing, beyond the shadow of a doubt, the precise location of the missile.

As an audience was present which had been invited to see the induction balance used, I now began an exploration of the ankle with the coils, and soon found a sonorous spot in front of the ankle which gave a very clear sound, and was heard by Dr. Markoe, Dr. Peabody and others. As Dr. Markoe held the telephone to his ear, listening to the unmistakable announcement by the bullet of its presence in this man's leg, he enthusiastically said to the audience: "Gentlemen, I wish every man in this room could hear what I am listening to at this moment." This sonorous spot was, of course, the point on the skin nearest to the bullet. Dr. Markoe now enlarged the sinus with the chisel and hammer, and removed from between the tibia and fibula a thickly incrusted leaden bullet weighing 200 grains, and the patient made a good recovery.

Canuck.

Selected Articles.

REST IN THE TREATMENT OF DISEASE.

BY H. C. WOOD, M.D., LL.D.

The object of the present lecture is to give you such ideas of the endeavors of the physician in the application of rest to the treatment of disease that you may intelligently co-operate with the doctor in charge of the case. You will remember, I trust, from your early childhood's teaching, that when Adam fell it was announced that by the sweat of man's brow he should earn his daily bread. In these later days we have changed all that, and a great many of the higher portion of man earn their daily bread not by the sweat of the brow but by the toil of the brain. In early childhood, when the little atom of humanity should be out in God's sunlight, he or she is put in school in cramped quarters, leaning over desks and learning lessons, struggling with toil, and weariness to develop the brain and nervous system at the expense of the physical powers, if thereby in the future he may climb over some other little atom, who, like himself, has been sacrificed to the Moloch of culture. As we grow in age this toil ever increases, until at last, when early manhood, or, perhaps, early womanhood, is reached, life is one of perpetual nerve-strain Many years ago, when old Professor Jackson, himself an example of this ruin which is wrought by overstrain, used to lecture to us at the University of Pennsylvania, he taught us this invaluable lesson, that every human being has a certain amount of nerve-force, which is produced by his system daily, and that if more nerve-force than the daily product be used, there will be a continual drawing on the reserve power, until there comes a time when nervous bankruptcy results. It is precisely the same as when a man with a fixed income lives on through the years, spending each year only a little, it may be, more than his income, but, as this continues, at last the capital begins to feel the drain, and, with an accelerated pace, ruin comes on.

Few of us, I think, clearly understand how much of nerve-force it requires simply to live. Remember that the heart beats seventy to eighty

times a minute. These great strokes of the central pump must go on through night and day in order that the blood may freely flow through the system. The great tides of air must be drawn in and forced out of the lungs continually, at the expenditure of an enormous amount of nerve-force. When digestion is to be performed, it must be at the expenditure of nerve-force. Most of you have learned from experience this fact, that when you are over-tired a meal will not be digested, which, at other times, you would be able to appropriate without trouble. Many years ago, when a boy, I walked across Chester County from Maryland to the Chester Valley. I had nothing to eat all day, and at night, when we came to a farmer's, he loaded his board down with heavy short-cake. Now, short-cake is a substance that yields only to the digestion of untired boys and ostriches. All through that night, and for several weeks afterwards I wished that I had never been born. I had so exhausted myself that there was left no nerve-power to digest this unreasonable food, and, as a result, it underwent fermentation, and poisoning occurred. The heart must act and air must be breathed, but digestion is not absolutely essential, and, consequently, when a man or woman becomes over-exhausted, digestion suffers and no food is taken. When power is failing and strain is greatest, too little fuel is supplied to meet the demand, and so, little by little, this vicious circle is passed around, until it ends in failure and bankruptcy, which is more and more complete. Again, often after an acute disease there is left a condition of exhaustion in which the vital powers are not able to supply the needs of every-day life and at the same time accumulate strength. Here, again, rest is necessary.

In health, to meet company and associate with our friends adds new life and vigor and power, but the entertainment of people by a woman who is feeble and worn out requires a physical expenditure which is often a great strain. Hence comes the exhaustion of an excessively active social life. Hence it has come that as a central idea of the rest-cure isolation is an important feature. Here there is of course great danger that there shall be rest-cure quacks, just as there are quacks with almost every form of special therapeutics. This is a remedial measure which is to be employed with care. It is not a stereotyped and set mould into which every little fragment of exhausted humanity is to be crowded and made to fit whether or not. In some instances it is to be applied with great severity, while in other cases it is only the principles which underlie it that are to be used.

The principle which underlies the rest-cure is, in the first place, the absolute avoidance of all physical expenditure of strength, so that there shall be opportunity to accumulate the wasted income. One of you lives beyond financial income, and you then go to some hamlet and live in a corner until the income thus saved adds to the capital, and the fortune is restored. This is precisely what the doctor attempts to do when he applies the rest-cure. He puts the patients to bed, keeps them quiet, and does everything to avoid the expenditure of a single unnecessary grain of vital force. He takes that little grain of nerve-energy and uses it to digest a little particle of food, and thereby adds to the exhausted power. It is a very common thing in hungerless patients, put to bed under proper surroundings and kept quiet, to see the appetite return at once. Under these circumstances the appetite is the measure of the deficiency or of the surplus of nerve-power. If there be too little power for nerve-digestion there will be no appetite. When there is a husbanding of the resources the appetite returns.

If a patient is put to bed and allowed to lie there perfectly quiet, then his muscular system is in much the same condition as is that of the fakir's arm. He ties up his arm, and keeps it so through the decades, and as a result there is a withered, structureless mass without power, the muscular fibre absolutely gone out of it. It is in the muscles of the human being and of the animal that the animal heat is chiefly produced. It is chiefly in the muscular system that are burnt up the effete substances that are the waste of the body, so when the muscles waste the animal heat fails, and the power to destroy effete matters fails. If, then, a patient is put to bed and kept perfectly quiet, there is lack of oxygenation of the tissues, and a gradual loss rather than a gain of power. The importance of rest in the treatment of disease has been long recognized, but it is to the sagacity of Dr. S. Weir Mitchell that we are indebted for the comprehension of the fact that we must not only try to conserve nerve-power, but to also supply power by maintaining the activity of the muscles in such a way that there shall be no draught upon the nerve-centres. If I move my arm there is an impulse flows out from the brain, and, by virtue of this expenditure, the arm is moved. If, however, I apply electrical stimulation, the muscle contracts, the structure of the muscle is maintained, and the activity of the muscle in destroying waste matters is kept up, but there is no expenditure of nerve-power.

Again, where there is no contraction of the muscles, there is a tendency to the accumulation of the juices from the blood in what we may call the by-roads of the system. It is not chiefly the blood that is in the vessels that directly nourishes the body, but the juices that have escaped from the blood that nourish the tissues. Along with every blood-vessel there runs a channel through which these juices that are not used are taken up, carried back into the trunk, and returned to the blood. When the muscles are inactive these little

channels become choked up. When I forcibly contract my arm all these little channels are squeezed by the muscles, much as you squeeze a sponge when you take it in your hand. The squeezing of the muscles drives the blood on towards the centre of the body, and also causes the return of these juices to the trunk, and finally to the blood. With absolute rest and quiet there is very little return, and the parts become choked with the half-used blood or flesh-juices. Electrical stimulation causes contraction of the muscles and aids very much in the return of these juices, but it is chiefly single muscles that we pick out by the electrical current. Therefore, partly for the purpose of aiding in the nutrition of the muscles, and partly for the purpose of returning these juices to the body, we add massage to the electricity. I have gone a little into the details of the principles involved because it not infrequently happens that persons in applying massage make mistakes because they do not appreciate the principles. Sometimes you will see a person rubbing the limb in a downward direction. This is contrary to the direction in which you wish these flesh-juices to go. You do not want to drive them from the arm into the fingers. You want to force them from the extremities to the centre. You continually try to work these juices from the outermost parts and return them to the central portions, where they will soon find their way into the blood.

Under certain circumstances the nurse is called upon to apply electricity. This is always an unfortunate thing, and the treatment sometimes fails on this account, for in using electricity for the purpose of which I am speaking, constant judgment is required to know what succession of muscles to cause to contract and also how much of power to employ. It is always much better, where it is possible to do so, to employ some of the younger members of the profession whose time is not as valuable as that of the middle-aged man. I shall not occupy your time with an elaborate discussion of the methods of applying electricity, but shall only call your attention to those parts of the electrical treatment which it is the duty of the nurse to understand. In the first place, it is the duty of the nurse to know how to take care of the battery. There are various forms of faradic batteries, which are the ones employed in this method of treatment, but they all have certain features in common. There is always a cell which contains some acid liquid, into which is plunged a plate of zinc. When the battery is in action the zinc is gradually eaten up by the acid, and the acid is gradually exhausted by the destruction of the zinc, so that the battery destroys itself. The nurse should see that when the battery is not in actual use the zinc is removed from the acid. In the form of battery which I have here, the zinc is removed by simply pulling up this rod. In other forms of batteries you have to loosen a screw which holds the zinc, and lift it out and put it into another cup. It is also the duty of the nurse to see that the battery is so kept that there is no spilling of the acid. The nurse should always see that the phsician is provided with warm water, in which he can wet the sponges, and it is well to use a little salt in the water. The water when first brought into the room should be hot, otherwise it may become cold before the séance is over.

With regard to massage, I believe that every thoroughly-instructed nurse should understand it. It, however, cannot be taught by lectures, but must be acquired by personal instruction. I myself know the theory of massage pretty thoroughly, but the practice of it is an entirely different thing. This requires training and the repetition of certain muscular movements until they are done firmly, smoothly and gracefully. In massage the movements should commence with the fingers. It is well to begin with a rotatory movement in the joints. Then you begin the massage proper. There are three different movements employed,—first, stroking; second, kneading; third, a beating movement, which is made with the fingers acting like so many sticks. The stroking movement is especially directed to driving the juices out of the part operated upon towards the centre of the body. It should be made with the two hands simultaneously. The pressure must be made with the ball of the thumb and the palm of the hand. Before making this movement, if the skin is very susceptible, it should be greased with sweet cocoanut oil, vaseline, or some other unguent. Remember always that this is not rubbing. If you rub a patient, you want to irritate the skin. When you are practising massage you do not want irritation of the skin, but you especially desire to affect the deeper structures. The stroking movement is sometimes made simply with the upward movement of the two hands. It is better to grasp the limb with the one hand above the other. Then you commence the movement with the left hand, and follow it with the right, then slip back with the left hand, while the right keeps up the pressure.

In the kneading movement the effort is made to pick up the individual muscle, and so grasp it between the thumb and forefinger that you roll the muscle on itself. The movement in striking or beating is made with the fingers perfectly loose, and should be made from the wrist and elbow, never from the shoulder. It should be made as rapidly as possible, and carried up the entire limb.

The question of feeding a patient who is undergoing this method of treatment must be decided absolutely by the doctor. It is the nurse's simple business to carry out the directions given by the doctor. The doctor under these circumstances,—and I think he should do so in the treatment of

all diseases,—should make out a written schedule, so that there can be no possible doubt as to the orders. Some years ago I had an important patient suffering with typhoid fever, who, I believe, was killed by a mistake of the nurse. It certainly was a very distinct solace to me that the orders of the nurse were plainly written. It was absolute carelessness on herpart. In all cases of disease the orders for the nurse should be written A schedule should be made out. We may start at eight a.m. with breakfast. At nine o'clock the bath may be given. In giving the bath it is essential that the patient should be absolutely nude, and she should be put between blankets. The water used should be as hot as can be borne. Unless otherwise directed, it is better to add a little heartshorn or ammonia to the water, rather than to use soap. From one-half to one ounce of ordinary aquæ ammoniæ may be added to the small bucketful of water This will leave the skin soft and in better condition than if soap has been freely used. The bath should occupy about thirty minutes. In most cases the patient is much better if rubbed with ice immediately after the bath or during the bath. This is not to be done unless ordered by the physician. If ordered to rub the patient with ice, you do not take a great ice berg, thrust it on the skin of the patient, and then go to sleep. You take a piece of ice, and, with an up-and-down motion, rub it over the limb until the whole surface has been covered. Then dry with a coarse towel. You will find that under this treatment the pale, muddy skin rapidly becomes pink. We have no power equal to this use of hot water and ice in drawing the blood to the surface of the body and in stimulating the skin.

At ten o'clock the patient may have massage. At eleven o'clock milk or some food will probably be ordered. At one p.m. dinner will be taken. Medicines, if employed, are to be put in their proper places. At four o'clock electricity may be employed and a glass of milk given. At five o'clock supper will be given. Seven or eight o'clock will be bedtime. Usually the patient is in bed all the time, but I think patients progress more rapidly if they are permitted to be up a portion of the time.

In making the toilet of these patients never allow them to do up their hair. The great mass of hair which many women have is in itself a labor to comb, and the holding up of the arms is especially tiresome, yet frequently this is one of the points on which patients are most stubborn. In a case of strict rest-cure, you must cut up the food of the patient, and see that the patient does not feed himself or herself. These are the cases in which the method is being used in its utmost strictness. If you have not had definite instructions with reference to these points, ask the physician what he wants you to do.

The hours of the day are twenty-four, but when a person is confined to bed they seem to become forty-eight. In this method of treatment there is so much to be done, in the way of bathing, massage, and electricity, that much of the time is past without the patient knowing it. There are, however, hours for which it is better to provide some amusement for the patient. I think, therefore, that every nurse, or every nurse who hopes to reach the highest point in her profession, should study the art of reading. The matter read is to be selected by the physician. It is very easy for the patient to tyrannize over the nurse who reads to her. A nurse recently told me that she had to read seven hours to the patient. This is tyranny, and it is the business of the physician to protect the nurse as much as it is his business to protect the patient. There is, perhaps, nothing which develops selfishness more rapidly and thoroughly in human nature than does a long period of chronic invalidism.

What I have been saying to you applies especially to the treatment of chronic diseases, but it seems to me to be a matter of importance that you should have a clear idea of the application of the same principles to acute diseases. It also seems to me important, in order that you may be *en rapport* with the medical profession, that you should have some understanding of modern therapeutics and ways of treatment. Therefore I shall at this point branch out a little from the discussion of my main subject, coming back to show you how rest comes into the treatment of all diseases. There was a time when medicine was a purely empirical, dogmatic art. There is of necessity still much of dogmatism and empiricism in the practice of medicine—that is, we are forced to do certain things because experience has taught us that certain things do good—but every day are we, as scientific physicians, getting the power of treating disease intelligently and rationally. Perhaps the greatest nuisances that the doctor ever encounters are those amateur doctors, usually, I am compelled to say, of your estimable sex, who think that they know medicine; the amount of their conceit is in direct proportion to the depth of their ignorance. Under these circumstances you will find that the great stronghold out of which no argument will drive these amateur triflers with life is, "I have seen, and therefore I ought to know." Once I was in the smoking room of a trans-atlantic steamer, and there was one of these pestilential creatures there, who this time wore a hat. He was continually bothering me with questions as to the why this and that man had been cured by this or that irregular practitioner after regular physicians had failed. Finally, after I had for some time dodged his questions to the best of my ability, a little Frenchman spoke up, and said to the questioner, "Your talk remimds

me of a story." He then told the following story, which I regret that I cannot give in his broken English: "Once in a village there was a shoemaker who was very sick of a fever. Some one who was visiting the wife said to her, 'Your husband has been sick for a long time. I can cure him. Give him as much pork and cabbage as he can eat, and he will get well of the fever.' The next day the woman fed her husband on pork and cabbage, and lo and behold, the fever left the man and he recovered. He put down in his note-book, for future reference, 'Pork and cabbage cures fever.' A few days later there was no ring of the anvil in the village smithy. The shoemaker went to inquire what had become of the blacksmith. He was told that he was sick with a fever. At once he said, 'I know what will cure him. Give him pork and cabbage.' The wife adminstered pork and cabbage, and the blacksmith incontinently died. The shoemaker, on seeing the symbols of death on his neighbor's house, gets down his note-book to see if there has been any mistake. No, there it is, black and white, 'Pork and cabbage cures fever.' Finally, after rubbing his head awhile, he exclaimed, 'I have got it!' and he wrote in his note-book, 'Pork and cabbage cures shoemakers with fever, but it kills blacksmiths.'"

This pork-and-cabbage style of therapeutics was the only method of treatment of disease forty or fifty years ago; but, thanks to homeopathic physicians, who emboldened the profession to watch the course of disease without treatment, the regular profession learned this important fact, that most acute diseases have in themselves a tendency to recover. It is the physician's duty to study the dangers which attend the disease and the methods which nature takes to bring about recovery. He should also study the drugs which he has at his command, and by inductive reasoning apply his knowledge of drugs to his knowledge of the dangers of the disease. To make this clear, let me take you out on the broad Atlantic, where the sunlight is thrown back from every wave as the steamer ploughs the furrows that unite two continents. The captain notes that the mercury is falling. The mate sees a little cloud gathering in the west. To-morrow the hurricane will be upon the vessel. The captain cannot put back the hurricane, but he can make everything snug and tight about the vessel, and he can so turn the helm that the ship goes before the wind. He knows the dangers and avoids them. He goes with the tempest and does not try to oppose it. This is generally the position of the physician in a case of acute disease. We cannot cure typhoid fever, but we can, if we study typhoid fever properly, carry the ship right on through the tempest and bring it into quiet waters.

The first thing that we learn in studying typhoid fever is, that in the majority of instances it causes death by producing exhaustion. We learn also that sometimes it kills by producing disease of the bowel with ulceration, and that a little particle of solid food getting upon one of these ulcers may tear open the bowel with fatal results. We study the dangers and see how they are to be avoided. Of all the dangers in typhoid fever exhaustion is the most serious. The successful treatment of typhoid fever rests not upon the administration of drugs, although this may be important, not upon the meeting of this and that symptom as it arises, although the skilful physician does that, but it rests especially upon the fact that the disease has been recognized early, and that every grain of strength has been husbanded, so that in the coming weeks, when it shall be needed, it shall be present. I have often compared a patient with typhoid fever to a ship on a coast in a storm. The ship is being driven on to the point of rocks, but beyond the jutting promontory is smooth water and safety. If the captain can carry the ship around that jutting rock, it makes no difference how close he may come to it, if he but clears it he is safe. So, in typhoid fever there often comes a time when it is the last grain of strength that holds the man as he crosses by the edge of the open grave. If you can hold him for a few hours, until a little strength is gained, he is safe. The grain of strength which you as a nurse wasted by allowing the patient to get out of bed three weeks before, may be the grain of strength which might have carried the man through. In every case of such disease it behooves you to remember that every particle of strength that you can save is perhaps life to that patient. The moment that there comes the slighest indication of the approaching storm the patient should be put to bed, kept quiet, and not allowed to make any motion or exertion. Many a doctor orders absolute rest, and the nurse perhaps thinks that she is carrying out her instructions, and the patient dies because the doctor is careless and the nurse is ignorant. Under these circumstances absolute rest means absolute rest. It means that the patient shall be put in bed, and not allowed to get out for anything. The patient may feel fairly strong, and will insist that he can get out of bed for the natural acts of the body. The patient is to be kept in bed, and under no circumstances, as you value your professional honor, do you let him rise. If the house is on fire, throw him over your shoulder and carry him out, but do not allow him to rise by himself

Never allow these patients to make their own toilet. If a bath is ordered by the physician, which apparently involves a waste of strength, see to it that it is your strength and not the patient's that is wasted. Do not let the patient do anything whatsoever. Do not let him make any exertion. The writing of a letter may mean death. A man may write a letter to his wife which is his own death-warrant.

This application of rest in the treatment of disease goes further. In all diseases the powers of the nurse should be directed to the saving of the strength of the patient, and you should remember that there is a mental worry which is more exhausting than physical exertion. Mere uncleanliness, a low voice to a deaf patient, a loud, high-pitched voice to a patient whose hearing is acute, failure to quickly understand the whims and caprices of a sick man or woman, are tormenting things which take away the rest and destroy the life of the patient. We talk about uncleanly nurses, and we all know the type of nurse which was pinned up by Dickens for all ages, as the entomologist pins up the beetle and watches its unclean movements, but the unclean nurse is scarcely as bad as the fussy nurse. In one of the hospitals during the war there was a young soldier who happened to be good-looking and near the door. The majority of amateur nurses that came into the room wanted to do something for him. A young lady came into the room one day and said, "Can I not do something for you?" "Perhaps," he replied. "Can't I wash your face?" "Yes if it will give you any pleasure, but you are the thirty-seventh that has done it to-day." A nurse who is continually shifting the blinds, moving about the room when there is no need for it, asking the patient whether he wants this or that, or is excessively active and alert, is a great evil.

Now, nurses of the University Hospital, let me say one more word to you. I think that your calling is one of the highest to which a human being ever devoted herself. You remember that the Bible tells us that, "He giveth His beloved sleep;" but sleep is rest, so will you, I trust, comport yourselves, that in the future, as you go from house to house, it shall be said of you, "She gave me rest."—*Therapeutic Gazette.*

ON THE EARLY RECOGNITION OF HIP DISEASE.

BY A. J. STEELE, M.D., ST. LOUIS, MO.

Knowing that formerly the mortality from hip disease was thirty per cent. of all cases, and that of late it is but five per cent.; and secondly, that marked deformity was then the rule of the cases that recovered, and that now serviceable limbs are had, we realize what better understood pathology, earlier diagnosis and improved methods of treatment have accomplished in this affection.

My old preceptor used to teach that the first duty of the practitioner was diagnosis, and that if we would benefit our patients it should be made early. As we now know how rationally to treat hip disease, excellent results, if such we would have, will turn upon the early recognition of the affection. In nine cases out of ten it is the family physician whose attention is first called to these cases; thus all the more important that he should early diagnose it, that he may at once institute treatment himself or relegate the case to the surgeon. It shall, therefore, be my aim at this time to so plainly outline the early indications of the affection that it may be readily recognized by all.

In the pathology of hip disease there is nothing so peculiarly different from diseased processes of the joints occurring elsewhere, that it should merit a special name. We might, perhaps, with as much propriety, speak of "liver disease," of "brain disease." Still, on account of the size of the hip-joint and the peculiar features of the disease, its symptoms, its history, its course, and the special treatment required, it does merit a separate name. Thus, from time immemorial it has been designated *morbus coxæ.*

We have but to remember that it is a chronic inflammatory affection, originating usually in the bone, and doubtless strumous in character, peculiar to the age of childhood, rare in later life. When far advanced, readily recognized by the mearest tyro in medicine, but in its incipiency often difficult to diagnose. No single sign is indicative of it, but a combination of the symptoms presenting themselves makes it comparatively certain. These symptoms are as follows (not, however, in the order necessarily in which they present themselves): Lameness, pain, change in position and apparent length of the limb, loss of motion, wasting of the muscles of the limb, tenderness on motion or pressure and enlargement of or about the joint. In making the examination the patient should be undressed and examined both standing and lying. For the latter a table covered only with a blanket or a quilt is best. And, 1st, of the *limp.* It is the lameness that probably first excites the attention of the mother to the child, perhaps neither severe nor constant, but more marked in the morning on arising, and gradually wearing away during the day. I cannot say that there is a limp peculiar to hip disease, because its character varies with the stage of the affection, and yet it may be that the patient favors the hip-joint, *i. e.*, though the ankle moves and the knee has motion, yet that the hip is stiff. The foot is put down firmly, it does not drag, as in paresis.

It is an interesting study, and I have indulged in some observations on the subject, of determining the part affected by the peculiar lameness or gait of persons as seen in their walk. Each joint has a characteristic limp; each part also. Recently I diagnosed Pott's disease in a patient seen for the first time, coming up the steps to my residence, from his peculiar carriage alone, the disease having been unsuspected by physicians previously

treating him for stomach and kidney troubles respectively. The limp in hip disease is due to the patient restraining the movement of the joint on account of pain, or because the joint is fixed by reflex contraction of the muscles. The lameness differs from that of partial paralysis—there is a stiffness in the motion. At first the child favors the limb: there is a certain awkwardness, the foot is not raised so high, the step is shorter. Later on, falls occur and the child manifests less confidence in the affected limb. Much activity during the day increases the limp. The effort of the child is to save the limb. Thus, in the limp of early hip disease, we have a sign always present, and from its peculiarity, almost diagnostic.

2nd. Perhaps the next more important sign is the *pain*. This, however, varies, sometimes so slight throughout the continuance of the affection as to be misleading, and again so severe as to excite the keenest sympathy for the little sufferer. It varies, not only in different cases, but also in different stages of the affection. Early there may be a complaint of fatigue and of soreness merely, and after exercise, of positive pain referable to the hip, and later on, to the knee. This pain is reflex in character and liable to exacerbations. The anterior crural, sciatic and obturator nerves send twigs to the joint and peripheral branches to the limb below, as to the knee, and the inner side of the thigh and leg. This fact is interesting, namely, that certain short branches of a nerve being irritated, pain is experienced in the long peripheral branches, and unless borne in mind will be misleading as to the seat of the trouble. I am constantly seeing mistakes of this character made by the physician and friends. In other disorders we have illustration of this same peculiarity of nerve irritation. In Pott's disease the pain is experienced in the front of the body, remote from the spinal lesion; so in stone in the bladder, such disquietude is experienced in the end of the penis that the patient would ever be pulling it.

Finding no difference in the contours of the two knees would help to settle the suspicion of affection of that joint. Later on a paroxysmal pain occurring at night is symptomatic of bone lesion and called the ostitic cry. The same is found in bone involvement of other large joints or of the spine. In my experience it is of frequent occurrence that cases are brought in for knee-joint affection or rheumatism of the thigh and leg that prove to be hip disease. The chagrin of the family physician is often great when told of his error. A neuralgic hereditary tendency on the part of some children may render them more sensitive, and account for their suffering more in hip disease than others who have no such idiosyncracy.

3rd. *Of Altered Position.*—Very early the limb is slightly flexed; a little later, abducted and rotated outwards; thus the foot is thrown in advance or a little forward of the body. Some carefully made experiments of injecting the synovial cavity of the hip-joint with fluid, in which the line of the femur was made to take a direction forwards and outwards, with rotation, would seem to indicate that, when in joint disease the limb assumes such position, therefore, there must be fluid in the joint, synovial or purulent. Such has been the specious reasoning of the past, but more correct pathology now shows that this position is assumed as one of greater comfort, whereby the ligaments are more thoroughly relaxed. As you know, Mr. President, sit at ease the thighs are flexed, the knees separated and the feet turned outwards, *i. e.*, there is flexion, abduction and rotation, naturally assumed as a position of greater comfort. This position of the limb affects the character of the locomotion. In order to get the foot to the ground the body is bent forward and inclined outwards, this is accomplished through curving the lumbar spine. If the limb will not conform to the body the body must conform to the limb, like the story of the mountain and Mohammed.

The pelvis is tilted downwards on the affected side, thus producing an apparent lengthening of the limb.

4th. *Loss of Motion in the Joint.*—The patient cannot move his thigh, except limitedly, and there is impairment of passive motion, a symptom of the greater value. The examination must be very gentle and critical. If it is roughly made all the muscles will contract to protect the joint, and this contraction will be mistaken for rigidity from disease. The patient lying on his back, the *sound* limb should be first seized and put through the motions of flexion, extension and rotation, for two reasons: 1st. To get the confidence of the patient. 2nd. To refresh the memory as to the possible movements of the limb. Then the suspected limb is seized and flexed to its utmost without force; then extended, and just here comes in the test so insisted upon by recent authors, the *experimentum crucis*, namely, that in extreme extension with the popliteus striking the table, the lumbar spine will be flexed, or bowed forward, if disease is present; then as the limb is flexed, the spine again will lie flat on the table. This is due to the contraction of the psoas and iliacus. Then, with the limb flexed to an angle of 120 degrees with the trunk, the thigh should be rotated, and this rotation will be limited if the joint is affected. If the rotation is unimpaired, almost to a certainity no disease exists. We may state the case axiomatically, that if hip disease is present, impairment or limitation of motion is certain. In these examinations do not use an anesthetic, for the consequent relaxation of the muscles would nullify the test and render nought the otherwise clear symptoms. I can well remember the day when to diagnose a

case of hip disease chloroform was given and the joint freely moved, to elicit grating of the suspected eroded joint surfaces, an exceedingly harmful and unnecessary proceeding. Tact must be used, the confidence of the little patient gotten. Finding you are not to hurt him, he will place himself in your hands, and the delicate tests may be satisfactorily made. So often in cases brought to me for consultation the child cries, and the mother apologetically says: "Dolly has become afraid of doctors." Shame! as Shakespeare has it, use all gently.

5th. I have found *wasting of the limb* a very constant sign, and with it too a flabbiness of the muscles. The circumference of the two calves should be compared, and then the thighs, taking a point on each equidistant from the upper edge of the patella (the markings are best made with an aline pencil)—and thirdly the flattening of the glutei and obliteration of the lower gluteal or natal fold. Great emphasis was placed by the older writers on this flatness of the natis, and so we were taught, but I do not give such significance to it. While it may be due measurably to wasting of the gluteal muscles from reflex nervous irritation, it is largely affected by position of the limb, and thus a secondary sign. This wasting of the limb, like the pain, is due to nervous reflex, and is quite constant. I do not assert that wasting of the limb is never caused by other affections, for in ankle disease, infantile paralysis, in flat foot, congenital dislocation of the hip, diminution in the size of the limb results, but it is present in hip disease and is a most important and ever-present sign. When marked and rapid, grave bone involvement may be suspected; when slight, that the affection is not yet severe. Would you suggest that the wasting is due to non-use of the limb? It is too marked and too rapid for that.

6th. *Of the Swelling.*—This perhaps is the least important sign in the early stage of the affection, possibly because so difficult to determine on account of the depth of the joint, the hip being covered by large muscles—different in the case of the knee, for example, it lying superficial. However, when present, may be recognized in front of the capsule or behind the trochanter, or by a brawny thickening about the joint. Best detected by grasping the part with the thumb in front and the fingers behind the trochanter, or *vice versa*. Remember, I am speaking here only of the early stage; later on, formation of pus causes marked swelling, easily detected.

Lastly, in regard to *sensitiveness of the joint*, elicited by some surgeons by striking upon the sole of the foot or knee,—a very unreliable procedure, because the muscles being put on guard, very little or none of the concussion will affect the joint surfaces, unless great force is used, which might even cause complaint if employed on the sound side. Again, in the early bone trouble the joint surfaces are not involved, and therefore, not sensitive. Recently I heard at a medical society a prominent physician relate a case of diagnosis and cure of hip-joint disease. He suspected such a trouble, placed his patient on the floor, and pounded on the sole of the foot; a cry resulting, hip disease was certain. Recumbency and weight to limb effected a cure in a few weeks. *Mirabile dictu!*

If we *should* desire to elicit sensitiveness of the joint, such being present, a better plan would be to use the femur as a lever, one hand under its upper third as a fulcrum, the other on the front of the knee pressing it back as the power, and the head of the bone forced against the ascetabulum as the weight. This can be done gently without exciting antagonism of the muscles or doing injury to the joint.

Of the Family History. If tendency to tubercle or struma exist, all the more would opinion incline to arthritic bone involvement. You perceive I am a disciple to the scrofulous origin of the affection, either congenital or developed *de novo* from some acute disorder recently experienced by the child. Thus I have rapidly individualized the signs of early *morbus coxæ*. When grouped, they furnish such unmistakable evidence of the affection that he who runs may read. Not all the symptoms may equally be present, one or more may be strongly marked, and others in abeyance. But I beg of you that with the limp and pain and impaired motion and wasting present, don't pooh-pooh the fears of the anxious mother, and say "growing pains," "rheumatism," "child will grow out of it." If the positive signs, on the one hand, and exclusive reasoning on the other leave the case still in doubt, keep it well under observation, You may already have had the alarm of the falling barometer, though the storm is yet distant.

In closing, you may desire to ask: "If hip disease, what then? What is to be done?" Even though time permitted, it is not my intention at present to reply, except in one word: Quiet. Keep the joint at rest, immobilize it.

Discussion.—Dr. Edw. Boeck dwelt upon rigidity of the affected limb as an early symptom. Dr. Jacob Geiger did not think struma the prime cause. The disease begins in the cartilage and synovial membrane rather than in the bone. Immobilization, without drugs, often cured. Early diagnosis meant early cure. Dr. Young called attention to pain at night during sleep Thought it well to make sound leg higher than the diseased one, so that the weight of the latter would make extension. Dr. Hurt thought that cases were decided by a traumatic cause acting on a strumous subject. Dr. Halley, in autopsies, had found the

bone always diseased, and but partial destruction of the cartilage and synovial membrane. Believed disease began in bone. The granulations appeared to him to be of tubercular type. Dr. Griffith called attention to Gibney's definition of hip-joint disease, "tubercular osteitis of the hip-joint." Dr. J. W. Heddens dwelt upon the importance of an early symptom, namely, rotation of the leg outwards. This is an effort of nature to cure. The iliacus muscle draws the head of the bone out of the socket and thus relieves friction and pain. Rotation of the limb inwards at once causes pain. Local treatment could be summed up as rotation outwards, extension, and fixation. Dr. Steele had reserved the theme of treatment for another occasion. He believed in the old teaching of Gross as to the causative influence of struma. *Quietness* to the joint, no matter how obtained, was the point. Excision can ordinarily be avoided.—*Transactions of the Medical Association of the State of Missouri.*

MEDICAL NOTES.

Pilocarpine is said to be of distinct advantage in *Menière's disease*, if given early. It may also be used with success in aborting an attack of ague, if given at the very outset.

In giving *quinine*, it is well to combine with dilute hydrobromic acid; it renders the disagreeable cerebral effects much less, does not interfere with its action, and renders it more soluble, while it really adds to its efficacy.

Prof. Bartholow states, gelseminum will often do more good in *irritable bladder* than any other remedy. It is especially adapted to those women of hysterical type, troubled by irritability at the neck of the bladder, calling for constant urination.

Prof. Bartholow insists on the value of ipecacuanha in *dysentery*, especially of the puerperal state. The patient should, however, be in ordinary good condition, and the initial dose should be at least ten grains, but a scruple is better. Push the remedy, in spite of emesis, until the appearance of the characteristic ipecac. stools.

The following was prescribed, at a recent clinic for *epileptiform seizures*, due to some coarse lesion in the brain, occurring in a child 13 years old:—

℞—Hydrarg. chloridi corrosiv., . . gr. $\frac{1}{10}$
Ext. ergotæ (aquos), ... gr. ij.
Ft. pil.
Sig.—Morning and evening.

A case of obstinate *secondary syphilis* was treated as follows by Prof. Gross:—

℞—Hydrarg. chlor. corros., . . . gr. $\frac{1}{10}$
Cocainæ, ... gr $\frac{1}{2}$
Aquæ (tepid), ... gtt. xv. M.
Sig.—Inject subcutaneously every other day.

Every night, on going to bed, resort to fumigation, using about ʒ ss calomel each sitting. Give quinine, iron, milk punch and best possible diet.

Prof. Da Costa presents the following as a strong point in the differential diagnosis of *chronic cerebral softening* and nervous exhaustion, or *neurasthenia:* In the latter, for a short period of, perhaps, a few minutes, the patient's mind will remain clear, and he is capable of mental effort, soon, however, to lapse again into his indifferent stupor. This alone, with the facts and history of the patient, will do much to establish a diagnosis when in doubt. In the latter, also, the headache is comparatively slight, while in the former it is a marked feature of the case.

For local applications in *gonorrheal epididymitis*, to be used after the more acute inflammatory process has subsided, Prof. Gross recommends the following:—

℞—Extract belladonnæ, . . ʒ ij.
Glycerini, ... f ʒ ss.
Aquæ, ... f ʒ j. M.
Sig.—Smear on inflamed part.

Or—

℞ Iodoformi, ... ʒ j.
Unguent. petrolati, . . . ʒ iij. M.

For the *hemorrhage of fibroids* of the uterus Prof. Parvin advised, in their order, the following: Ergot, hydrastis canadensis, infusion of gossypium, hot water injections, dilatation of os uteri, astringent tampons to uterine cavity, incising endometrium over the tumor, scraping and curetting the mucous membrane, application of persulphate of iron, removal of tumor by vagina, by gastro-myotomy or gastro-hysterectomy, or anticipate the menopause by oöphorectomy; the last, however, is not always certain in its results.—*Coll. and Clin. Rec.*

The Rocky Mountains for Recreation.—Why do so few of our young men go West for recreation? There is no land where nature recreates a man as she does there. You literally renew your youth. The climate is invigorating beyond words. For nervously exhausted men, for weary brains there is simply nothing to touch it. I have gone to the (Rocky) mountains thoroughly fagged out, unable to sleep well or eat well—life a burden and work an impending horror. In a fortnight I have been eating as many meals a day as I could prevail on my men to cook, and have been glad to fill up chance spaces in my internal economy with raw bacon. Yes, many a time after a monumental dinner, when we have gone into camp at five in the afternoon, have I eaten with relish that most lasting of all provisions, a piece of raw bacon, before turning in. It is true some

at first find the rarified atmosphere of the mountains trying to chest or heart, and many also complain of loss of appetite and loss of sleep; but if the man is sound in limb and lung, and if he does not over-do it or over-exert himself at the very beginning, but does take regular exercise, in ten days or so all life seems to awaken within him; he may not sleep so long or so heavily, for he has probably camped at an altitude of eight or nine thousand feet (excellent camping-places are sometimes found at a height of ten thousand feet or over), and he does not need as much sleep as if he were at sea-level He may puff and blow like a grampus as he faces a moderate hill; for he has scarcely realized yet that the atmosphere is so rare that he must boil his potatoes (if he is lucky enough to have any) for at least two hours, and he will do better if he boil them all the morning, and that he cannot by twenty-four hours' boiling make beans soft enough to feed to his horse. But he is growing younger, not older. The world of cark and care seems very far away, walled out by the heavy mists that roll up from the plains. What a fool he was to bother his soul as he did with a thousand useless things.—W. S. Rainsford, D.D., in *Scribner's Magazine*.

Thiersch's Method of Skin-grafting.—Dr. Mynter reports this method, as proposed by Thiersch, of Leipzig, and as he has used it in the Buffalo (N.Y.) General Hospital, as follows:

The granulations are removed by the aid of a sharp spoon down to the underlying firmer tissues, and the rather copious bleeding stopped by pressure with compresses dipped in a solution of chloride of sodium, 0.6 per cent. The bleeding stops generally in the course of five to ten minutes, The flaps are now cut with a sharp razor, generally from the outer surface of the humerus, and then transferred directly on the shining surface of the wound, deprived of its granulations. The flaps are five to ten centimetres long, one or two centimetres broad, and contain, even if microscopically thin, the whole papillary layer and a part of the underlying stroma.

The flaps are completely unravelled by aid of two probes, and then firmly pressed against the surface by aid of a soft sponge dipped in the same solution of chloride of sodium. The transplanted wound is covered with a piece of protective dipped in the salt solution and an antiseptic bandage applied over it, which is not disturbed for eight days; the superficial wounds produced by the razor healing in eight days under iodoform bandages. If the wound be completely covered with flaps it will be healed in about eight days; but in very large ulcerations especially after severe burns, it is almost impossible to get skin enough from the patient himself, and one will then after eight days have the opportunity of seeing not only the growth of the flaps themselves, but also the stimulating effect on the border of the wound, which is quite wonderful to observe. It is astonishing to see how quickly the citcatrization progresses in those large ulcerations from the border and the numerous island formed by the new flaps.—*Buffalo Med. Press.*

Hydrocele in the Female.—The *New York Medical Journal* has recently published a report of three cases of this rare condition, read before the New York Clinical Society by Dr. Wright. He notes that hydrocele in women has been ignored by most surgical writers till within the last few years; not forty cases have been reported. It is liable to be mistaken for irreducible hernia, and, when inflamed, for strangulated hernia. In doubtful cases the diagnosis may easily be settled by the hypodermic needle. In the first case there was a fluctuating tumor, the size of a pigeon's egg, just above the inner half of Poupart's ligament, on the left side; it had existed for several years; there was no impulse and it was irreducible. It was aspirated twice, straw-colored serum being withdrawn. On the second occasion, the inside of the sac was scarified with the point of the the needle; the sac inflamed and was completely obliterated six months later. The patient had borne four children. In the second case there was a soft fluctuating tumor the size of a pigeon's egg in the right inguinal region, just above the middle of Poupart's ligament; it seemed to consist of a large superficial and a smaller and deeper sac. There was no impulse, and the tumor was reported as irreducible, but the patient had noticed it present occasionally ever since the birth of her first child, and she used to push it back with her hand. Three weeks before examination, while lifting a child, the tumor described by Dr. Wright appeared and she could not reduce it. Colic, flatulence and constipation came on, and the tumor was tender. On November 15th, 1883, after ice had been applied to the swelling, it was aspirated. The two cysts required a separate application of the needle, clear yellow serum was withdrawn and the small sac had to be aspirated again three days later. The tumors had never refilled when the patient was seen three years later. The third case was in the practice of Dr. Quimby; the patient was a single woman, aged forty-two. A fluctuating tumor, about as large as the last joint of the thumb, was found just above and parallel to Poupart's ligament on the right side. Six or eight years before the patient had, it appeared, been operated upon for hernia of the same side. The tumor had existed "for some time," and caused a dragging pain. The patient used to reduce it herself. It was aspirated seven times in nine days and then ceased to fill any more.—*British Med. Journal.*

TREATMENT OF FRACTURED OLECRANON.—Reginald Horsley, M.B., C.M.Edin., writes: During my term as house-surgeon in the Royal Infirmary, Edinburgh, Prof. Annandale operated in three cases for united fracture of the olecranon after ordinary treatment had been tried and failed. The operation was thus performed under strict antiseptic precautions, the warm douche of corrosive sublimate, 1 in 2,000 being used. A straight incision, similar to that for excision of the elbow-joint, having been made, the fragment of the process was found, scraped, and sutured to the end of the ulna, which was also freshened. Strong catgut was used in the case of a child, silver wire in the other two cases. After operation the limb was laid on a straight, padded, anterior splint, and fixed in position by bandages. In this position it was left undisturbed for three weeks, when rubbing and partial movement was begun, the arm being each day replaced upon the splint. A fortnight later movement was voluntarily performed with sufficient ease, the splint was removed and the patients left the Infirmary. When they returned a little later to "show themselves," movement was perfect and the joint free from stiffness. In one case re-fracture occurred, and the operation was repeated. Owing probably to greater disorganization of the parts, the wound suppurated after the operation. It was, therefore, dressed daily, the arm being carefuly supported meanwhile, and bandaged to the splint during the intervals. The final result of the case was as stated. I hope this rough statement will be of use to "A Member."—*British Med. Journal.*

CORROSIVE SUBLIMATE IN THE TREATMENT OF DIPHTHERIA.—Stumpf has used the following prescription, with excellent results:

R.—Sublimat.,	. . . . .	gr. 3.
Aq. destil.,	. . . . .	℥ 5¼
Aq. menth.,	. . . . .	℥ 1

The cavity of the throat was sprayed with this every three hours.

Thirty-one cases were so treated, with but one death. No ill effects were observed from the treatment excepting salivation, which was not severe, and persisted only three or four days.

The temperature fell under the treatment.

As to the amount of fluid which could be safely used, one drachm of the fluid is enough for one application. When a solution of 1 to 2,000 was used fifty inhalations would give a maximum dose, of one and a half grains of sublimate for an adult.

In children older than six years, 1 to 1,000 solution was used; for children between two and six years, 1 to 2,000; in children under two years of age, 1 to 4,000 or 1 to 3,000.

Inhalations with a hand-spray are best given for the first five times, hourly; then for five times ever two hours; then every three hours until the symptoms are mitigated.—*Therapeutische Monatshifte.*

HISTORICAL SKETCH OF ST. BARTHOLOMEW'S HOSPITAL.—In 1102 a certain Master Rahere, who had followed the profitable, but not wholly respectable, trade of minstrel during the reign of William Rufus, and had attracted the favorable notice of William's successor, Henry I., found himself in possession of what was for those days a tolerably large sum of money. This money he resolved to use—like many other gay gentlemen of his time—in atoning by some good work for the little irregularities of his earlier years. Accordingly he founded a priory in Smithfield, the ancient chapel of which still exists as the parish Church of St. Bartholomew the Less. Nor did his zeal stop there. Hardly was the priory built when its founder obtained from King Henry the grant of "a certayne peece of waste lande nigh thereunto," upon which he built and endowed "to the honor and prayse of the blessed Sanct Bartholo mew, a hospital for a master, brethren and systers and for the good entertaynement of all poor folk and such as bene sick of divers diseases, until such time as they be whole and sound agayne." Thus established in the heart of London, the new hospital did abundance of good work, and was manfully helped in doing it by the honest burghers of the city. In process of time the priory was incorporated with it, and in 1547 the boy king, Edward VI., made over the entire building to the citizens of London as a public hospital, in which capacity it probably found plenty to do in an age when every man had a weapon and what Paddy would call "a dacent notion of usin' it," and when street fights, with three or four lives lost on either side, were matters of almost daily occurrence. The great fire of 1666, which swept away so many priceless monuments of London's past, reverenced the famous hospital, but its ancient walls gradually crumbled before the slower assaults of time, and in 1729 the whole edifice was rebuilt in the modern form, which it still retains. In 1782 the management of St. Bartholomew's was united with that of Bethlehem, St. Thomas's, Christ's Hospital and Bridewell, and the group thus formed recived the title of "The Five Royal Hospitals," the superintendance of which was intrusted to the "pious care of the Lord Mayor of London."—*N. Y. Times.*

TALISMANIC BELTS.—About two years ago a physician of Saint-Germain, having been called to a woman in the last stages of consumption, found her body tightly girt with a belt or band made of cords (the *ceinture de Saint-François*). These *ceintures* are believed by the superstitious to have the power to preserve those who wear them from hell. A *ceinture bénie*, supposed to facilitate

parturition, is given out from one of the principal convent schools in Brittany. It bears the painted inscription, "*Notre-Dame de Délivrance, protégez-nous.*" Before it is sent out, great care is taken to touch it with a fragment of the *ceinture* that is reputed to have belonged to the Holy Virgin, the authenticity of which piece of material is guaranteed by numerous parchments.—*N. Y. Medical Journal.*

AN INCIDENT AT AN ANTIVIVISECTION MEETING. The Paris correspondent of the *New York Times* tells of an amusing occurrence at a recent meeting of an antivivisection society held in that city. One of the speakers, a woman, having inveighed particularly against medical students, was asked by a student, who happened to be present, why she wore a bird in her hat—"a poor little robin" that "had been slaughtered simply to supply a vain woman with a foolish ornament." The account goes on to say that the lady was cut short in her eloquence, and could only stammer forth the poor protest that she hadn't done the bloody deed herself.—*N. Y. Med. Journal.*

SUCCUS ALTERANS IN RHEUMATISM AND SYPHILIS.—We are reliably informed that the preparation Succus Alterans (McDade) is becoming a very popular remedy with the profession, and being very extensively prescribed in general practice as an alterative tonic, aside from its use in syphilitic diseases. The good results from its use in treatment of rheumatism, of chronic character especially, is worthy of consideration. The remedy is certainly growing in favor, and as no great claims have ever been made for it, but simply placed upon its own merit, we think it could possess no higher recommendation.—*Indiana Medical Journal.*

"ODE TO BACILLUS."

Oh, powerful Bacillus,
With wonder how you fill us,
Every day!
While medical detectives,
With powerful objectives,
Watch you play;

In epidemic glanders,
In certain forms of "janders,"
You delight.
E'en to the fifteenth culture,
Voracious as a vulture,
You can bite.

Koch and Spina growing splenic,
O'er your powerful septicemic,
Rant and roar.
Schmidt says, when pus grows rotten,
Only then you are begotten,
Not before.

In lung tuberculosis,
In skin necrobioisis,
How you squirm.
While gonorrheal burning
Is caused by sporules turning,
Some affirm.

'Tis said a crypto-coccus
Will very often choke us,
If we fail
To drop the acid phenic—
Which is antisepticemic—
On its tail.

Friar says in fever, yellow,
He finds a little fellow
Breeding pest.
Gregg swears, do what he will he
Sees nothing but fibrilli
By his test.

In atmosphere nephritic,
In poison diphtheritic,
How you revel!
In earth and air and ocean,
You keep disease in motion
Like a devil.

But, Bacillus, O, Bacillus,
You try in vain to kill us,
Yet we thrive.
And though you try to blind us,
Yet next year I hope you'll find us
Quite alive.

—*Journal of Reconstructives.*

WASHINGTON—THE MEDICAL CONGRESS.

Oh, city of broad streets and ample ways,
Whose stately avenues attract the eye;
Not here on frowning battlements we gaze,
Awing with martial front the passer by;
Yet here, too, has been heard the cry, "To arms!"
And hearts have wildly throbbed at war's alarms!

What if the din of Commerce pass thee by?
Fair city, with thy Founder's deathless name!
While lifts thy Capitol its dome on high,
What rival city shall eclipse thy fame!
Mistress of States—of central pow'r the seat,
Where all a mighty nation's pulses beat!

And now the doctors of the world are here,
Not arm'd with lancets, as to meet a foe,
But each presenting in his chosen sphere,
A fragment of the truth he best can show;
Gleanings from distant fields with toil and care,
Or happy inspirations—all too rare!

Or trotting out some hobby, with slow pace,
(I had one of my own, and ought to know),
Or, curious, studying the foreign face,
Or, musing, idly sauntering to and fro;
Or starting from brief sleep with vivid sleep,
Born of the garden party and ice cream!

Thanks, hospitable friends, for kindness shown,
Too good to last, these pleasant busy days,
The winged hours have all too quickly flown,
And home we hasten by our diff'rent ways:
Meeting as strangers, parting now as friends,
Adieu fair city! for the Congress ends.

Lindsay, Ont. THOMAS W. POOLE, M.D.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

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MEDICAL SPECIALISTS.

The question of medical specialism is one of increasing interest. The range of medical knowledge and practice has now become so wide as to have outgrown individual mental capacity, however generously endowed by nature, or cultivated by education and experience. No man can be, at the same time, the foremost physician and foremost surgeon of the day. No one can be the first oculist of his time, and also the first gynecologist. The fact that the field is too extensive for individual careful cultivation is patent to all. The admission of this opens the door to specialists, and the question resolves itself into the possibility of a man's ability to do a special work more successfully than can one who attempts to be more or less perfect in all. The day for sneering at the specialist is gone by; his advent is past, and his stay is assured, therefore, the most rational course to adopt is to define his qualifications and sphere of action, and allot him his true status as a necessary member of the profession.

The practice of specialties has been brought into much disrepute by quacks and humbugs. Recognizing the reasonableness of specialism, and the readiness of the public to attribute extraordinary powers to the specialist, many persons have not been slow to plume themselves in the garb of the specialist without possessing the first qualification for the work. The true specialist is no embryonic product, but a full-grown man, a giant in fact; for unless he be far in advance of his fellows in his chosen field, he is no specialist. Medical specialism is unique, and differs widely from specialism in other professions and callings. The medical specialist must needs qualify himself by a careful study of the whole range of medical science. The human mechanism is not made up of detached pieces fitted together like the wheels of a clock, but is rather an inseparable mysterious whole, each part in direct relation, communication and sympathy with all the other parts. It naturally follows, therefore, that the specialist must be acquainted, not with a part merely, but with the whole organization. Not only so, but he must also be acquainted with the pathological conditions liable to affect the various parts, and the symptoms, local and general, to which they give rise. This involves a vast amount of preparatory labor. The competent specialist, however, is not yet equipped for his work. Specialism can never have a spontaneous evolution. It can never properly exist, except as the outcome of general experience in the diagnosis and treatment of diseases. When a general practitioner finds that he has special tastes and adaptations, let him cultivate these, and if successful beyond his neighbors, his right to be regarded as a specialist will be recognized and undisputed.

The following cases illustrate how important it is to the specialist to be well grounded in general practice. A leading physician went to New York to obtain relief from misty and cloudy vision—"the atmosphere appearing as though a smouldering fire were near." The gentleman first consulted was not a specialist, and apparently, without inquiring into the case, took him to a distinguished oculist. The patient was advised to go home and confine himself in a darkened room, take mercury and live on low diet. He gradually grew worse. His urine was at last examined and revealed albumen and tube casts. He died in less than two months. Nephritic amaurosis was mistaken by the specialist for acute retinal congestion. Another medical man suffered similarly. A noted oculist assured him that he had post-polar cataract. He was advised to postpone operation until vision had become much more imperfect, as it most certainly would. This gentleman gave his eyes needed rest, lived more generously, and exercised in the open air. A few months of this treatment removed his cataract, and completely restored his sight.

Here eye-strain and imperfect nutrition were mistaken for cataract by a noted specialist. Still another medical man, run down by fever and other causes, suffered nervous troubles, for which he consulted a leading neuro-pathologist. The thermo-cautery was applied to his occiput for congestion of the brain; he was ordered mercury and iodide of potassium before meals, and ergot and bromide of sodium after meals. His condition did not improve, and, growing impatient, he quit medicine and took to the country where his troubles speedily vanished. The specialist mistook blood poverty for grave cerebral disease. The following case is more remarkable for its negative side, as regards the specialist consulted. A medical gentleman of our acquaintance, whose wife had suffered from uterine troubles for some months, decided to consult one of the most distinguished gynecologists on this continent. The lady had been troubled with irregular and excessive menstruation, unhealthy discharges, etc. The cervix was greatly enlarged and nodulated. The uterus also was firm and enlarged. Malignant disease was apprehended. The specialist made a careful examination. He was unable to make a definite diagnosis, but leaned to the belief that the disease was non-malignant. He could not say whether pregnancy existed or not. Four months after the lady was delivered of a healthy child, and the distortion of the cervix was afterwards ascertained to be due to laceration.

These instances of error are not referred to as a bill of indictment against specialism; on the contrary, they offer a strong plea in its favor. If the well trained and experienced specialist is beaten on his own chosen ground, what must be the diagnostic record of the man who strives to cover the whole ground? We also learn from the above cases that specialism has its own peculiar dangers. Moving within a given circle, or along a certain groove is not unattended with danger. In obedience to a well-known mental law, the tendency is to widen the circle and embrace within its circumference matter foreign to it. That the greatest amount of good may be done to the greatest number, it is manifestly in the interest of suffering humanity that specialism should have a leading place, and that specialists should rise to a higher plane in the profession than they have hitherto done.

THE USE OF ALCOHOL IN DIPHTHERIA.

The rule usually given by lecturers in medicine as to the use of alcohol in various diseases is, that its action should be watched, and that if the pulse is found to become slower and fuller, the temperature lower and the tongue more moist, continue to give it; but if on the contrary the pulse and temperature are not favorably affected, or the tongue shows no sign of an improvement in the condition of the mucous membrane of the alimentary tract, it should be discontinued. This is a good general rule, and one which most medical men follow. In one dread disease, however, namely, diphtheria, it is to be doubted whether it is ever contra-indicated. Here we have the system profoundly affected by a specific poison, and antiseptic treatment should be followed by the best results. As to any specific antiseptic for the germs of diphtheria, it yet remains to be discovered, as is witnessed by the countless methods of treatment we see vaunted by various writers in all countries. Since the introduction of the potash treatment some five and twenty years ago, nearly every important drug in the Pharmacopœia has been used, and with alleged success, for the amelioration of the symptoms and cure of the disease, and the results obtained, as shown by statistics, vary greatly, owing no doubt to the varying circumstances of environment, the virulence of the epidemic, the previous condition of the patient, etc. It is doubtful whether any drug, save tinct. fer. mur., receives the same recognition in the treatment of diphtheria that alcohol does. It is an antiseptic of high value, as well as a general stimulant, and is, therefore, indicated both on account of its specific action upon the germs of the disease, which have found their way into the blood, and for the purpose of tiding the patient over a very difficult place. Some of the oldest, most thoughful and most successful of our practitioners believe, that the alcohol treatment alone would be perhaps the best and safest which can be undertaken. Under its influence the patient improves as to the worst symptoms, the membrane gradually disappears, the temperature is lowered, the pulse is slowed, and a sense of well-being is given to the patient, which places him in the best possible position for recovery.

But to get the full benefit of this drug, it must

be given in *large quantities*. The best method of administering it is to prescribe small and repeated doses, to be given by the clock. It is best given diluted with water, and to the amount which even a child of two or three years will take with great advantage, is astonishing. Many give it in milk, by which means nourishment is supplied at the same time, a matter of great importance; but whatever method is adopted, the great point to be remembered is to give it freely. Dr. Richardson, the late president of the Ontario Medical Association, states that he has known a child of two years suffering with diphtheria, take a bottle of port wine in 48 hours with the happiest results, and that he has the fullest confidence in the action of alcohol, not only in diphtheria, but in all its congeners, depending upon the presence of specific germs in the blood. Potter recommends it as a local antiseptic, diluted with equal parts of water, and applied as a spray every half hour. The editor of the N. Y. *Medical Times* says:—"Alcohol, we make bold to say, is the prince of antiseptics, and the most perfect and reliable medicine of which we have any knowledge in diphtheria. Diluted with equal parts of water, and given in small and repeated doses, the malignant symptoms of this most fatal malady soon disappear and convalescence becomes assured." It is said to be an excellent prophylactic, used as a gargle three or four times a day.

THE EARLY REMOVAL OF TUMORS.

Few individuals relish the idea of having a new growth removed as soon as discovered, and when it is, perhaps, causing no pain or inconvenience beyond some slight mental discomfort. While many persons, and especially women, are ever on the look-out for cancer, and frequently imagine their days are numbered on the discovery of a lump in the breast, or lip, yet they will, in the majority of cases, postpone operative procedure as long as possible, and frequently, in case the neoplasm is malignant, till such procedure can not be hoped to afford more than a short margin of life to the unfortunate sufferer. So long as life is bearable they will press the cause of all their woes to their bosom or lips, as the case may be, notwithstanding the advice of friends and medical attendants.

Perhaps the profession does not sufficiently insist on the immediate removal of all new growths that are found in those under their care. Surely such a rule could be only productive of good. It is not always possible to make a positive diagnosis as to the malignant or benign character of a tumor, but what does that matter? All tumors are unsightly, they are frequently obstructive to the ordinary movements and occupations of life, and we may say are always the cause of more or less mental disturbance and worry. As was remarked by a young woman who had a benign tumor removed from her breast, she "did not draw a breath of pleasure for months" before its removal. In any case, then, the early removal of new growths seems to be indicated, but especially will the patient be benefited by such action when malignant disease has been established, for it is certain that, in many cases, the early removal of even malignant growths is followed by years of non-recurrence; perfect health, and comparative mental ease being enjoyed during those years, a happy consummation not to be hoped for if the remedial measure be postponed till the latest possible date.

RASH FROM THE ADMINISTRATION OF SALICYLATE OF SODIUM.

This remedy is among those which produce cutaneous disturbance. Twenty grain doses of the drug every six hours, administered for acute rheumatism, produced, after a few days, a petechial eruption accompanied by distressing itching. The neck, breast and arms suffered most, but no part of the body, except the scalp, was entirely free from it. Neither the conjunctivæ nor throat were affected. Upon cessation of the remedy, the rash and itching disappeared. There was some shedding of the skin in flakes. Morrow mentions cases of erythematous, urticarial, petechial and edematous condition of the skin from the use of the soda salt, as also from the salicylic acid. He says the erythematous eruption bears a striking resemblance to that of antipyrine, belladonna, chloral, etc., and he says the pyrexia, sweating, edema, with which the erythema is usually accompanied, are vaso-motor phenomena, experiments upon animals having shown that the salicylates act "primarily and principally upon the vaso-motor centres." In

the case alluded to above, carbolic oil (1 in 30) relieved, to a great extent, the intolerable irritation and itching which was the most disagreeable manifestation of the action of the drug.

THE PUPIL IN CHLOROFORM ANESTHESIA.—In an exhaustive article in the *British Med. Journal*, on the above subject, Dr. Henry J. Neilson, has formulated his conclusions as follows:

1. The effects produced by chloroform on the pupil are at first dilatation, varying in degree and duration, then contraction as the narcosis becomes profound, and dilatation again as the sensibility is returning. If the administration be still continued with the pupil strongly contracted and motionless, the pupil will also dilate, but in this case more suddenly and completely, and will be coincident with a state from which it will be difficult or impossible to resuscitate the patient. This latter is the dilatation of asphyxia. 2. So long as the pupil dilates in response to excitation by pinching, etc., the patient is not sufficiently narcotized for the operation to be proceeded with, unless the operation is slight and does not require complete anesthesia. 3. When the pupil becomes strongly contracted and immobile, no more chloroform should be given until it begins to dilate again. If, then, further anesthesia be required, a little more chloroform should be given until the pupil again contracts. 4. The occurrence of sickness causes dilatation similar to, but more sudden than that which happens when sensibility is returning, and the efforts of vomiting have the effect of arousing the patient. The watching of the respiration and the pulse, which are doubtless the best indications of the effect produced on the individual by chloroform, and, therefore, of vital importance for safe administration, does not, in many cases, furnish evidence of the state of sensibility, in regard to which he regards the state of the pupil to be of the greatest assistance. The sign usually relied on, namely the insensibility of the conjunctiva, is by no means a satisfactory test, for in many cases conjunctival anesthesia is established long before the patient can be said to be under the influence of the drug. By observing the pupil, the administrator can tell at once when the effect of the drug is on the wane, because the pupil then begins to dilate slowly. Noticing this he can, by the administration of a few drops more chloroform until the pupil again contracts, prevent the occurrence of struggling and interruption of the operation. In this way he can keep the patient in a state most suitable for the satisfactory performance of the operation without narcotizing him more than is necessary.

THE MUTUAL RELATIONS BETWEEN PHYSICIAN AND PHARMACIST.—The *Pharmaceutical Era*, of Detroit, says that the importance of the above to both professions has led them to offer a prize of *fifty dollars* in gold for the best essay on the subject. The essay should endeavor to show how the ideal harmonious relations between physicians and pharmacists, both as individuals and as represented in their respective organizations, may be best realized, and all competitors must be governed by the following conditions:—

1. Anyone interested in the subject may compete. 2. The essay must not exceed 2,000 words in length and must reach us previous to January 1st, 1888. 3. The MSS. must be free from the author's name, address, or other marks of identification, and we recommend typewriter copy wherever practicable. 4. The author's name and address must be enclosed with the manuscript on separate paper. 5. All the essays submitted in competition for the prize are to be the property of the *Pharmaceutical Era*, and to be published or not at the discretion of the editor, but names of authors will be suppressed if requested. 6. A committee consisting of five representative men chosen from the medical and pharmaceutical professions, to whom the essays shall be submitted anonymously, shall award the prize, and the names of the committee will be announced with their decision. Address, D. O. Haynes & Co., box 583 Detroit, Mich.

TREATMENT OF TYPHOID BY COLD WATER.—Dr. Austin Flint's conclusions in this matter are borne out, says Dr. Allen (*Med. Times*), by the results in 13 cases which have occurred in his practice. They are as follows:—1. That by the use of cold water externally in cases of typhoid fever the temperature of the body may, after a variable time of its continuance, be reduced to 102°, or even lower. 2. After a period, varying very much in different cases, and also at different times in the

same case, the temperature rises as high or higher than before the reduction. 3. Upon repeating the employment of cold as often as the axillary temperature exceeds 103°, the number of repetitions necessary is extremely variable in different cases. 4. The sponge-bath, with the wet sheet and sprinkling, may be employed to the exclusion of the bath-tub in the treatment of typhoid fever. 5. These modes of employing cold water may be continued sufficiently long for the reduction of the temperature to 102°, or even lower, and repeated as often as may be required, without fear or injury. And the study of these cases furnishes no ground for supposing that a liability to complications or accidents is thereby increased; and that the reduction of the temperature by these modes, as often as it rises above 103°, improves the condition of the patient. 6. The results of the analysis of those cases where cold has been faithfully used, afford us encouragement to employ it with the expectation of diminishing the severity of the disease and its dangers to life.

Mind Cure.—In referring to a recent article by Rev. Dr. Buckley on this subject, the Boston *Med. and Surg. Jour.* says:

Perhaps the cream of the whole article is the following, which constitutes a portion of a prayer, printed *verbatim*, capitals and all, from a text-book on a "Mind-Cure," issued by the President of the "New York School of Primitive and Practical Christian Science," who states that his school will be free from "eccentricity, pretension and fanaticism:"

"'PRAYER FOR A DYSPEPTIC.

"'Holy Reality! We BELIEVE in thee that thou art EVERYWHERE present. We *really* believe it. Blessed Reality, we do not pretend to believe, think we believe, believe that we believe. WE BELIEVE. Believing that Thou art everywhere present, we believe that Thou art in this patient's stomach, in every fibre, in every cell, in every atom; that Thou art the sole, only Reality of that stomach. Heavenly, Holy Reality, we *will* not try to be such hypocrites and infidels as every day of our lives to affirm our faith in Thee, and then immediately begin to tell how sick we are, forgetting that Thou art everything, and that Thou art not sick, and therefore, that nothing in this Universe was ever sick, is now sick, or can be sick. Forgive us our sins in that we have this day talked about our backaches, that we have told our neighbors that our food hurts us, that we mentioned to a visitor that there was a lump in our stomach, that we wasted our valuable time, which should have been spent in Thy service, in worrying for fear that our stomach should grow worse, in that we have disobeyed Thy blessed law in thinking that some kind of medicine would help us. . . . Lord help us to believe that ALL Evil is utterly unreal; that it is silly to be sick, absurd to be ailing, wicked to be wailing, atheism and denial of God to say "I am sick." Help us to stoutly affirm with our hand in Your hand, with our eyes fixed on Thee, that we have no dyspepsia, that we never had Dyspepsia, that we will never have Dyspepsia, that there is no such thing, that there never was any such thing, that there never will be any such thing. Amen.'"

How Scarlet Fever comes to Michigan.—The Michigan State Board of Health has received information from Dr. Sifton, Health Officer of Sutton's Bay township, which illustrates, in a striking way, how this country gets contagious diseases from the old countries. October 2, 1887, a family arrived in Sutton's Bay, Leelanaw county, direct from Norway. The family came over in the *S. S. Ohio*, of the Inman line, reaching New York September 30. Scarlet fever was on board the steamer during the passage, one child dying before the landing, and "several more were sick in the same way." One child of this family was taken sick with scarlet fever the day after reaching New York. The family, however, proceeded over the New York Central and the Lake Shore and Michigan Southern, to Michigan; then over the Detroit, Grand Haven and Milwaukee, and the Grand Rapids and Indiana, to Traverse City; then to Sutton's Bay. Another child of the family has since come down with the disease. The family had a certificate, signed by the surgeon of the steamer, that they had been protected by vaccination against small-pox; so they passed without detention the quarantine authorities at the port of New York, after they had been exposed to a contagious disease which causes more deaths by far in this country than small-pox.

Another New Local Anesthetic.—Since cocaine made such a noise, drunime has been put in the market, but this latter has not filled the bill. Now a new remedy, an alkaloid named *stenocarpine*, is before the profession. Dr. Claiborne, of New York, has prepared it from the leaves of a tree, the exact place of which is not yet known, but which has a close resemblance to *acacia stenocarpia*. This alkaloid is said to possess powerful anesthetic

properties, rivalling cocaine in its importance in ophthalmic practice. From two to four drops of a 2% solution introduced into the conjunctival sac, are sufficient to produce anesthesia, rendering various otherwise painful operations on the eye perfectly painless. The anesthesia is lasting, from fifteen to twenty minutes elapsing before sensation returned. It is also a mydriatic, and lessens intra-ocular tension.

How Some of the World's Great ones see us. — In dedicating "Underwoods" to his uncle, Thos. Bodley Scott, Robt. Louis Stevinson thus pays homage to the medical profession:

"There are men and classes of men that stand above the common herd: the soldier, the sailor and the shepherd not unfrequently; the artist rarely; rarelier still, the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization and when that stage of man is done with and only remembered to be marvelled at in history, he will be thought to have shared as little as any in the defects of the period, and most notabiy exhibited the virtues of the race. Generosity he has, such as is possible to those who practice an art, never to those you drive a trade; discretion, tested by a hundred secrets; tact, tried in a thousand embarassments; and what are more important, Heruclean cheerfulness and courage. So it is that he brings air and cheer into a sick room, and often enough, though not so often as he wishes, brings healing."

A Sanitary Convention, under the auspices of the State Board of Health, will be held in Albion, Mich., on Tuesday and Wednesday, Dec. 6th and 7th. There will be sessions the first day at 3 p.m., and 7.30 p.m.; on the second day at 9.30 a. m.; 2 p.m., and 7.30 p.m., local time. At each session of the convention there will be addresses or papers on subjects of general interest pertaining to public health, each paper to be followed by a discussion of the subject treated. The admission to all sessions of this convention will be free, and the ladies are cordially and especially invited. The invitation is especially extended to health officers to be present and take part in the discussions.

The Farny Suture.—We beg to call attention to the advertisement of this article, by Reichardt & Co., of New York. From samples sent to our office we should say it will prove of the greatest practical value, not only in cases of ordinary flesh wounds, but also in many of the minor surgical operations. It will be found of great service as an adjunct to relieve the strain on sutures, as well as a very handy and effectual means of exerting pressure upon any portion of the body where such may be necessary. From the sutures being made in either straight or rounded pieces they may be applied to all kinds of wounds, no matter how irregular. Altogether, we think it will prove of great service to the general medical and surgical practitioner.

Lime in the Treatment of Cancer.—Dr. P. Hood, writing to the *Lancet*, says, that as the lime recommended for the cure of cancer, that of oyster shells, is not always obtainable, he would suggest as a substitute, the oyster preparation of the London Pharmacopeia, in doses of six grains twice a day, in "a wine glass full of milk or other fluid," such as tea." For an ointment to be applied to an open cancer, he recommends creta. prep. ʒiij, ol. amygdal. ʒij, the lime to be well mixed with the oil, and then added to two ounces of lanolin. This does not usually have a disagreeable odor, but if it does, a few drops of essence of bergamot may be added. It is to be applied on lint twice a day.

Warner's Safe Cure.—The *Druggist* gives the following as the formula for Warner's Safe Cure:

R.	Powdered Saltpetre, . .	gr. 320.
	Liverwort, ...	ʒ i.
	Water, ...	q. s.
	Alcohol, ...	ʒ 2.
	Glycerine	ʒ 1½.
	Ess. Wintergreen . . .	gtt. 40.

Infuse the liverwort with a pint of hot water for two hours; strain and filter. Dissolve the nitre in this liquid; when cold add the other ingredients and water to make up to one pint.

Notched Teeth.—Jonathan Hutchinson calls attention *(Brit. Med. Jour.)* to a form of notched teeth, not due to syphilis. He says: There is a notching of the upper incisor teeth, affecting the two central ones of the permanent set, which is often confounded with that due to syphilis, although having no connection with it. The points of distinction are that the non-syphilitic tooth is wide at its free edge, and is hard and craggy, while that from syphilis is pointed and worn down. A

case is mentioned where such notched teeth were hereditary in a family, the effects occurring in pairs, and never affecting the whole row.

SULPHUR IN CHLOROSIS.—Schutz and Strübing have drawn the following conclusions (*Med. Chron.*) as to the treatment of chlorosis by sulphur:—1. In cases of simple chlorosis, in which iron has no effect, the general condition is markedly improved by sulphur. 2. After sulphur has been given for some time, treatment with iron could be started and continued successfully. 3. Sulphur is not borne in cases of chlorosis complicated with catarrhal, inflammatory conditions of the digestive tract.

℞—Sulph. depur., ... 150 grains.
Sacch. lact., ... 300 grains.
M. F. pulv. Half a teaspoonful three times daily.

CARMINATIVE FOR COLIC IN INFANTS.—Dr. McGee recommends the following (*Med. Record.*):

℞—Magnes. carb., ... ℈ij.
Ol. aniseed, ... ♏j.
Tr. cardimomi,
Tr. asafætide, ... ♏ij.
Glycerinæ, ... ʒij.
Aquæ menthe viridis,
Aquæ Camphoræ, . . . ad fl. ℥ij.
M. Sig.—Teaspoonful every half-hour till child is comfortable.

This does not preclude warm baths, hot cloths on abdomen, relief of constipation if present, massage, etc., *but it does* all opiates and soothing syrups.

THE ONTARIO MEDICAL LIBRARY ASSOCIATION.—The secretary of the Ontario Medical Library Association has received a letter from Dr. Hodge, of Mitchell, Ont., donating to the library the entire collection of medical works of the late Dr. John Rolph; as also from Dr. H. C. Wood, of Philadelphia, making a large number of donations from his private library. It is gratifying to know that the interest in the scheme is general throughout this Province, and it is to be hoped the gifts so far offered, are but an earnest of many more to follow.

PNEUMONIA.—Dr. Moore, of Dublin, concluded his paper before the late International Congress in these words: "The day is seemingly not far distant when we shall speak of pneumonic fever in precisely the same way as we use the term enteric fever at present; that is, to signify a zymotic or specific blood disease, manifesting itself after the lapse of a certain time—the period of incubation—by physical phenomena, objective and subjective, connected in this instance with the lungs."

POT. IODID. IN ASTHMA.—Dr. Cozenave de la Roche says (*British Med. Jour.*) that the above remedy is very efficient in asthma if given in cow's milk. His formula is *aq. dest.* 150 grammes, *pot. iod.* 8 grammes. A tablespoonful in a cup of milk twice a day.

BROMO-SODA.—W. C. Deane, M. D., 727 Lexington Avenue, N. Y., says, during my voyage on the steamer *Arizona* I cured at least twenty-five cases of sea-sickness by giving Warner & Co.'s preparation of "Bromo Soda" in large doses. I heartily commend it, as from personal experience it afforded great relief when other remedies failed.

SACCHARINE.—A New York druggist announces (*Med. Rec.*) that he has just received an invoice of anhydroorthosulphamidobenzoic acid (C_6H_4 ($^{Co}_{So_2}$) N H), or saccharine, one grain of which is sufficient to sweeten a cup of tea or coffee.

DOSE OF ANTIPYRINE.—Dr. Ostrander, of Lansing, Mich., writes (*Med. Rec.*) that he has always succeeded in getting the desired result with five grain doses of antipyrine, repeated each hour for three hours. He believes it useful in migraine, and to relieve the pain of rheumatism.

DR. JOHN WILLIAMS has such faith in antiseptic treatment, says Junius C. Hoag, that he would not hesitate to attend a patient in labor, although he had, on the same day, visited another patient suffering from puerperal fever.

PROFESSOR BARTHOLOW recommends a three-grain pill of iodoform three times a day, for the flushings and other morbid sensations occurring about the climacteric.

The London (Eng.) School of Medicine for women has sixty students.

RICHARD QUAIN, the great anatomist, died recently, aged 71 years.

Books and Pamphlets.

PATHOLOGY AND TREATMENT OF GONORRHEA AND SPERMATORRHEA. By J. L. Milton, Senior Surgeon to St. John's Hospital for Diseases of the Skin, London. Octavo, 484 pages. Illustrated. Price, bound in extra muslin, $4.00. New York: William Wood & Company. Toronto: Carveth & Co.

This work is intended for the practitioner and not for the college student, as it takes for granted an acquaintance with the elements of the subject.

Some of the statements contained in it are pretty sweeping, and will be read with some surprise by the majority of medical men. As an example, we may quote the following: "In men who have reached the age of three or four-and-twenty, anything beyond one (nocturnal) emission a month, requires attention." Besides the pathology and treatment of Gonorrhea and Spermatorrhea he includes, in the present work, chapters on the pathology and treatment of Impotence. He is somewhat iconoclastic, but gives as his reason the fact that most of the remedies vaunted as curative in Gonorrhea Spermatorrhea and Impotence have not fulfilled the expectations which the first accounts of them were calculated to raise.

He says, "Nothing has been recommended by myself in this work but what has stood the brunt, not merely of experience, for that I rate rather low, but that of special observation."

The book is, we believe, invaluable as a consultation book, filled with sound doctrines, and what is of more importance to the busy, general practitioner, practical and concise directions as to treatment. The publishers have done their part of the work well.

A MANUAL OF THE PHYSICAL DIAGNOSIS OF THORACIC DISEASES. By E. Darwin Hudson, jr., A.M., M.D., Professor of General Medicine and Diseases of the Chest, in the New York Polyclinic, etc.

This is a well printed book of 150 pages, on good paper, from the press of W. Wood & Co. In consequence of the sudden death of the author, "just after the manuscript had been placed in the printers' hands," the correction of the proof sheets devolved on his friend Lawrence Johnson, M.D. The work will most probably be more highly valued by the teachers of clinical medicine than by the students, though to both it will not fail to prove highly serviceable. Chapter VI, which is devoted to a synoptical exposition of the diseases of the lungs, will be studied with profit by both classes of readers. The author has here given, in a condensed and clear form, everything of importance in the "definition, pathology, causes, symptoms, physical signs, diagnosis, prognosis, and treatment," of the most important affections of the lungs, sixteen in number. The like, if not more and better, may be said of his synopsis of diseases of the heart. The illustrating engravings, numbering 93, will be more easily understood by the teacher than by his pupils. In truth they present sorrowful evidence of the consequences of the untimely removal of the author from earthly labour; but the student who has become well grounded in his anatomy, will be quite able to overlook those deficiencies and obscurities which must be presented to the beginner, or to the idle and careless, who are always promising to *begin* to study earnestly, but too seldom reach this herculean achievement. No book, however excellent its merits, can ever benefit this class of illusionists.

LESSONS ON GYNECOLOGY. By William Goodell, A.M., M.D., Prof. of Clinical Gynecology in the University of Pennsylvania, etc. Third edition, revised and enlarged. Illustrated. Philadelphia: D. G. Brinton. 1887. Toronto: Hart & Co.

The new edition of Goodall's popular work shows careful revision. It is not a complete treatise on the diseases of women, but consists mainly of clinical and didactic lectures delivered to students at the University of Pennsylvania, and possesses the advantages and disadvantages of matter from such a source. Suffice it to say, that the work is practical, without much padding, and that the author goes straight to the point. The book is a very useful one both to the student and practitioner.

MASSAGE, PRINCIPLES AND PRACTICE OF REMEDIAL TREATMENT BY IMPARTED MOTION. By Geo. H. Taylor, M.D. New York: John B. Alden. 1887.

This little book of 173 pages, will be useful as a guide to those ignorant of massage in the treatment of chronic disease. It is written for the general public, but will be found interesting and instructive to the general practitioner.

Births, Marriages and Deaths.

On the 19th Oct., Dr. T. H. Robinson, of Kleinburg, to Annie C. Hill, of Toronto.

On the 24th Oct., Dr. J. F. Bell, of Toronto, to Jessie Brown, of Eglington.

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ELECTRICITY IN GYNECOLOGY.

BY A. LAPTHORN SMITH, B.A., M.D, M.R.C.S., ENG., F. O. S., LOND.; LECTURER ON GYNECOLOGY, BISHOP'S UNIVERSITY, MONTREAL.

As the treatment of diseases peculiar to women, by electricity, has in the last few years attained a high point of perfection and is now attracting attention all over Europe and America, owing to the writings of Apostoli, of Paris, and having lately had the pleasure of spending some time at his clinic, I thought it might be of interest to your readers to be furnished with some observations on this treatment. And although Apostoli himself is an enthusiast and therefore more impressed than anyone else with the advantages of his methods over all others, still there is so much reason in what he teaches, and his views are so thoroughly borne out by actual results, that no one can spend very much time under his tuition without becoming almost as much impressed with its advantages as he is himself.

Certainly the treatment of diseases of the uterus by electricity, either galvanic or faradic, has this in its favor, that it is the rational one for all diseases of that organ. Take, for instance, displacements; these all depend either on the womb being too heavy for its supports, or its supports being too weak to bear even a normal weight. In the first case the stimulating influence of a current applied to the muscular tissue or organ will have the effect of contracting its muscular fibres and consequently of diminishing its size and the calibre of the vessels supplying it with blood; for the muscular coats of the blood-vessels are made to contract, and the active and passive congestion is thereby diminished.

If on the other hand, the size and weight of the organ remains normal and the displacement is due to defectiveaction of the muscles which should support it, owing to their being in a state of degeneration, then no medication can be so effective as that which tends to tone them up and develop them to their normal strength. In most of our text books this cause of displacement is slightingly dealt with. A year ago, at the meeting of the Canada Medical Association, at Quebec, in a paper which I had the honor of reading on Alexander's operation, I analysed the causes which lead to the uterus being held in place, and on my recent visit to Europe, the opinion I then expressed was fully endorsed by many of the leading authorities, whose views I obtained. Defective muscular tonus of the uterus and its muscular ligaments, and of the vaginal tube or column, and of the perineal muscles on which the end of that column rests, they all agreed was the cause of uterine displacements. This view is a rational one and is proven by the fact that they occur always in women whose muscular system is in a low state of development. Uterine displacements, I fancy, are unknown or at least very rarely met with in women living in a savage state, or among women of those countries where the manual labor is mostly performed by members of that sex. They are especially noticed among women of the higher classes, and among the lower classes living in a high state of civilization, whose muscular system, not only of the internal organs, but also of the limbs, is in a state of atrophy, amounting almost to wasting. In the dissecting-room we find cases in which the muscular system is so very much attenuated, that many of the muscles cannot be found. It is for this reason, doubtless, that in many cases for which the operation of shortening the round ligaments or round muscles has been performed, for the cure of retroflexions or retrodisplacements, the operator has been unable to find them. As women of very well developed uterine muscles rarely, if ever, have anything to complain of in that direction, it is, I fancy, rare to find these muscles well developed in cases of displacement. It was, therefore, with peculiar pleasure that I found Apostoli treating these cases by means of electricity. If we were called upon, for instance, to treat a case of lateral curvature of the spine depending upon the degeneration of the muscles of one or both sides, we would not be justified in trusting to artificial sup-

ports, such as iron stays, but rather we should, by electrical applications, exercise, good food and good air, develop those muscles, rather than make them more lazy by doing their work for them by means of supports. And as, every time muscles contract, they become larger and stronger (witness a blacksmith's right arm), so the best way of enlarging and strengthening the weak muscles would be to make them go through a course of gymnastics. It is within the experience of every doctor that displacements of the uterus have come on suddenly after an effort of some kind, while, in my own experience, some cases occur every summer regularly on the return of warm weather, when everything and everybody seems to be relaxed. Cases of displacement often come to us with a history attributing them to nervous shock or sudden fright. This could hardly be the case if the uterus owed its being held in proper position to ligaments instead of muscles, as only the latter depend upon the nervous system to any extent. Again, there is a large class of cases in which the disease consists of instability or disorder of innervation, in which the nervous system seems to act viciously for the want of proper control.

During my stay with Apostoli, I have over and over again seen women come to his clinic complaining of agonizing pain in the ovarian region, which was so real and so severe that they could not endure the weight of my hand. After ten or fifteen minutes' application of the faradic current passing through a long, fine wire, the disorders, under its influence, seemed to be so controlled as to no longer produce the manifestations of which the patient complained, and I could then press my hand deep down upon the ovaries without causing the slightest pain.

With regard to the sort of electricity; one should be able to distinguish the properties of galvanic and faradic currents, and even to accurately apply the different kinds of the latter, exactly in accordance with the requirement of each case. Thus, the current from the short, thick wire is suitable for putting the muscles through a course of gymnastics, and is, therefore, the peculiar remedy for muscular atrophy wherever it may be; while the current from the fine, long wire is especially adapted to disorders of the nervous system, being sedative and tranquilizing in its effects. The galvanic current is to be applied to disorders of nutrition, and the effect varies according to the pole used. Thus, the negative pole has a caustic action similar to alkalies, such as potash or ammonia when used in sufficient strength, and leaves less tendency to retraction, while the positive pole, around which acids accumulate, has a coagulating and retracting action, and is especially suited to cases of hemorrhage. It is, however, in the treatment of fibroids of the uterus that Apostoli has achieved a world-wide and well-deserved reputation. The former treatment in vogue has been to remove the tumor, always a dangerous operation, or the removal of the appendages which is not without the danger common to any opening of the abdominal cavity. In these cases Apostoli uses a constant current, and for this he requires a good battery consisting of about 60 Leclanché cells, which have the advantage of working a long time without being refilled or cleaned, and only using themselves up while they are in actual use. 2nd, and perhaps the most important, a good galvanometer, by which he is able to measure out the exact dose of electricity suitable to each case. The importance of this instrument will be understood when we remember that the outflow, of electricity from any good battery varies from time to time and from day to day, so that what would be a suitable dose to-day would be a quite useless and weak one to morrow. 3rd, a collector, by which he is able to bring in the circuit, one by one, as many cells as are necessary to produce the proper dose. And as the first cells are used up, he is able to bring into the circuit the middle or last ones which still remain fresh. 4th, an invention which is specially his own, and which has led to a revolution in the application of high currents (I refer to the clay electrode), consisting of a sheet of zinc about ten inches square, on the upper end of which is attached a wire, and on the under surface a cake of very moist potter's clay, held together by means of a piece of tarletan on its under surface, the piece of zinc being embedded on its upper surface. Before the application of this material to the purpose of an electrode, the highest dose of electric current which could be applied without cauterizing was from 40 to 50 milliampères; but with the moistened cake of clay, by which the point of contact with the skin is spread over such a large surface, and by which the electricity enters by thousands of doors, I have

over and over again seen a strength of 250 milliampères administered without the patient complaining of any sensation in the skin, or producing the slightest heat or redness. 5th, a uterine electrode, made of platinum, for the application of a positive current, for which, owing to the acids produced causing rapid oxidation, this metal is alone suitable. This platinum electrode is prevented from touching the sensitive vagina by means of a non-conducting covering for a considerable part of the length, otherwise the current would escape into the vagina, rendering the operation unprofitable. For this protecting covering he has found a celluloid tube the best.

In all cases of uterine fibroids occupying a position in the uterus, such as to render a safe puncture impossible, he employs a positive current in the uterine cavity, as will do in cases of endometritis, and when it is not advisable to destroy a large amount of tissue by puncture. When, however, the fibroid is in the posterior half of the uterus, so that he can reach it through the posterior cul de sac, he uses a negative current applied through an electrode made in the shape of a trocar. As much of his success is due to the observation of a number of little details which might be considered unimportant, I might describe the process of making a chemical galvanocaustic puncture:

1st. A thorough irrigating out of the vagina with a sublimate solution of $\frac{1}{1000}$, from which he has never had any ill effect.

2nd. Having introduced his right finger so as to touch the fibroid, pressing down the uterus against it with his other hand, he inserts the celluloid tube to the place he has chosen for his puncture. He then introduces the steel trocar (the length having been previously arranged, so as to project one-third to two-thirds of an inch beyond its covering) through the roof of the vagina right into the tumor. The current is then very gradually turned, a careful watch being kept on the galvanometer. When the woman complains of pain he diminishes her sensibility by, for the moment, increasing the current beyond her endurance, then gently reduces it by a few milliamperes, so that she is better able to bear it by comparison without complaining. This is what he calls establishing tolerance. He then carefully increases the current by successive stages, to one hundred milliamperes, for the first seance, but in subsequent seances reaching as high as two hundred and fifty. The woman is easily able to bear this high intensity without a great amount of pain, and also the short pain caused by the introduction of the short trocar. After from five to ten minutes the application of the current is very carefully and gradually reduced, as the sudden cutting of it off would cause a painful shock, owing to the induced current set up in the pelvis. The woman is then again carefully irrigated out and a small piece of iodoform gauze is introduced up to the wound, and the woman is then placed in bed for a few hours or for half a day, after which she returns to her home without any inconvenience. On her coming again a few days later, the gauze is removed with the slightest stain of blood or sometimes a little pus on it. The vagina is then again washed out and a fresh piece of gauze used, and after a week, or in some cases after two or three applications a week, the woman is able to return to her occupation.

Apostoli does not pretend that this method will rapidly remove a large fibroid, but he does pretend to cure the patient symptomatically; that is to say, it is slightly reduced in size after each application, and the woman suffers no inconvenience from it.

I did not have to depend, nor did Apostoli wish me to depend upon his word for the advantages of his treatment, as he invited me to walk about among the patients and to converse with them as to the kind of sensation they felt before treatment and as to the relief they experienced after, and with few exceptions their reports were exceedingly encouraging, while in cases of acute pain in the organs on pressure I could myself observe the relief. There is one thing which he does very thoroughly and insists upon his assistants doing, and that is a thorough cleansing of the hands and instruments before and after each application, or even examination. The hands have to be well washed and the fingers scrubbed with sublimate solution, and the vagina of every patient is thoroughly washed, while the instruments which are introduced into the uterine cavity are rendered scrupulously clean by being passed through the flame of a spirit lamp, and afterwards dipped in a strong carbolic solution. That he has never had any trouble from sublimate poisoning, may perhaps be explained by a little knack he has of pressing

down the perineum with his finger after each washing, so as to prevent any liquid from remaining in what is called the seminal lake. His work is done with the patient in the dorsal position, with head and shoulders considerably elevated and her feet being held in supports, permitting the buttocks to be brought over the edge of the table so that any liquid falls into a receptacle placed beneath it.

In France and Germany I was so much impressed with the advantages of the dorsal position in certain cases, that I brought with me from Berlin a pair of supports for the legs, which I have had fastened to my office table, and have found that a woman can be kept in the proper position and more strongly and firmly held than if I had two assistants with me.

Another thing that strikes one at Apostoli's, and indeed at the clinics of all the leading men in Europe, is the little use they make of the speculum, while in America it is a common thing to find a dozen or so of them in the gynecologist's outfit. Apostoli only uses a Cusco's speculum and even that very seldom, trusting more to the sense of touch than to sight. Another thing which impressed me greatly, was the manner in which they do not hesitate to bring the uterus down to the vulvar orifice, or at any rate sufficiently so to make an operation upon it easy. Then Apostoli, when he cannot reach the uterus with his finger, presses it down from above until he can feel every part of it; while Martin and Olshausen, of Berlin, do not hesitate to grasp each lip with what they call a *kugelzahn*, which is as commonly in use there as a speculum is here, and then draw it down to the field of vision.

Another class of cases in which Apostoli's treatment is remarkably successful is that of chronic permietritis, but he is very guarded in the use of this treatment if there is the slightest sign of acute inflammation. In a case of chronic cellulitis, the patient was enabled after five or six applications of the current, to walk a considerable distance, sometimes several miles, although before the treatment she had to come in a carriage. One case especially, which impressed me very much, was a woman who came there in a full state of hemorrhage. Apostoli cleansed the uterus and vagina and then introduced the positive platinum sound, five inches in length, into the uterus, and applied a strong current. After a few minutes he requested me to withdraw the sound, which had entered quite easily, and to my surprise I was unable to do so. The instrument seemed to be grasped as though it had been held in a vice; after using considerable force I was unable to withdraw it, when it came out quite clean.

With regard to parovarian cysts, he thinks they might in many cases be punctured with the galvano-cautery through the vagina, which would prevent any escape of their contents into the peritoneum. This he has not yet tried, but suggested that it was a good field for experiment.

In cases of extrauterine fœtation, he would prefer to push down the egg and puncture it with a chemical cautery. In cases of polypus, he removes the tumor by destroying the whole uterine mucous membrane, by means of a negative chemical cauterization.

In arrested development of the generative organs, he uses the faradic current from a long fine wire, and applied by means of a uterine or vaginal exciter, which is made of hard rubber, through which the two currents run to near the end, where they terminate in platinum electrodes, one or two inches of the non-conductor intervening between them. This furnishes a stimulating influence which spreads for a considerable distance all through the organs, increasing the activity of their circulation.

An immensely powerful current can be easily endured through the uterus, provided that the external parts are properly protected.

The ordinary currents used in medicine, if applied to the uterus, are quite inefficient for the treatment of uterine diseases.

If we were to touch the current he uses at its full strength, it would give a sensation that we would never forget.

In conclusion, I may state my conviction, that in electricity, we have one of the most powerful and at the same time most manageable of agents in the whole list of gynecological therapeutics.

In a future article I purpose giving the results of my own experience in the cases now under treatment.

Sir William Gall is recovering from his slight paralytic shock.

TREATMENT OF CHRONIC DISORDERS BY SWEDISH MOVEMENTS AND MASSAGE.

BY B. H. BROBERG, TORONTO.

For about seventy-five years the Swedish movements have been applied in Sweden, where Prof. Henry Ling, the originator of the system, opened the first institution in 1813. Thanks to the successful results of the treatment, Prof. Ling was granted a stipend by the Government, to enable him to enlarge the establishment. After the founding of the Royal Central Institute in Stockholm, other institutions gradually sprung up, not only in Sweden, but also in different parts of Europe, all under the direction of graduates of the Central Institution. The institutions on a large scale throughout Europe number at present about thirty-five. In the United States the system has of late years taken a firm hold; thanks to the zeal of Drs. Geo. Taylor and Wm. Karlsive, of New York; Dr. Benj. Lee, of Philadelphia; Dr. Sparre, of Chicago, and others, and being acknowledged and supported by such men as Prof. Louis Sayre, Drs. Pepper, Weber, and other prominent medical men, there is little doubt of its getting as good a foothold here as in Europe.

The system is divided into two classes of movements, Medical and Hygienic. The medical, calculated to improve imperfect physiological relations, and to break up long-standing ailments; and the hygienic, to produce a harmonious development of the whole organism. The former have exclusively to deal with disease, and the latter act as preventives to disease, inasmuch as the movements are essential, not only to the development of the growing generation, but also to keeping aloof ailments peculiar to persons of sedentary habits, and to old age.

The medical movements are divided into three kinds: Passive, Active, and Duplicated.

Passive movements (under which group we place massage) are given without any exertion on the part of the patient, and are usually administered until the patient has gained sufficient strength to take active and duplicated movements. Active movements are made by the will and power of the patient, and duplicated under resistance of operator or apparatus. It is an undeniable fact, that persons of sedentary or "one-sided" habits are more subject to divers ailments, than those whose position affords them opportunities to put all their physical as well as mental powers into action. If the movements have the power to aid the development, and to prevent functional disturbances in growing humanity—as well as the mature—there is no reason why the organs impaired by disease should not, by the same means, be wholly or partially restored to the performance of their respective duties.

I propose, in as few words as possible, to explain some of the influences of the movements upon the various functions which constitute *health*.

1. What influence have the movements upon the blood?

Movements accelerate circulation and respiration. Increased circulation assists absorption of nutritive substances from the alimentary canal, and increased respiration supplies the blood with more oxygen (the chemical action of which is so essential in the reproduction of the organic bodies) and causes a decrease of carbonic acid. The increased supply of oxygen and absorption of nutritive substances gives a richer deposit of nutriment to the tissues, and causes an increased oxidation and absorption from them of substances useful for nutrition. The increased circulation also promotes separation from the blood of substances injurious to the organism.

2. What influence have the movements upon the nervous system?

We seldom meet sufferers from nervous disease among the working classes, or among those who—by means of health-giving exercises—keep their systems in good condition; whereas we very frequently find them among people who lead an inactive life. This is a fact so well known, that an answer to our question might seem unnecessary. The impulse of the will for active movements issues from the brain, and is distributed by the nerves to the muscles. An active movement consists, consequently, in a harmonious action of the will, nerves and muscles. According to physiological laws, muscular action develops and increases tissue, therefore it also must strengthen the nerves situated in the tissues, and the nerve centres with which they are connected. From this we also draw the conclusion, that muscular action has a beneficial influence upon the will.

3. What influence have the movements upon the respiratory organs?

As before mentioned, muscular action increases respiration. A deep inspiration, while moving the arms slowly upwards, elevates the head, the back is drawn erect and slightly backwards, the shoulders are drawn backwards, whereby the chest-muscles elevate the ribs, thus enlarging the chest cavity in a horizontal direction. The chest cavity is simultaneously enlarged in a vertical direction, through the contraction of the diaphragm.

In a strong expiration, the abdominal organs are pressed together by the abdominal muscles, the diaphragm is forced upwards, and the ribs are lowered. Here the chest cavity is made smaller, in a horizontal and vertical direction. Through a constant practice of respiratory movements the chest cavity is enlarged, and as a consequence the respiratory organs will obtain fuller play.

If movements result in an increase of oxygen and decrease of carbonic acid in the blood, as well as a speedier circulation, they must also have a beneficial effect on the digestive and secretive organs.

The effects of the movements in aiding the absorption from the alimentary canal, has already been mentioned. We all know that exercise increases appetite. This is to a large extent due to the stimulating effect upon the abdominal organs, by the indirect action of the voluntary abdominal muscles upon the involuntary muscles. In constipation, for instance, when, through weakness of the intestinal walls, feces have collected in the cecum, colon, sigmoid flexure, etc., strong movements of the abdominal muscles—together with outward pressures and manipulations—have rectified cases of long standing, without any other means whatever.

For the normal performance of functions of the lymphatic system, blood in a nor mal state, as well as a normal supply thereof, besides normal nerve power, is necessary. It has already been stated that the movements produce these results.

The effect of the movements upon the skin shows itself in the increased temperature and color. The stimulating effect upon the nerves located in the skin, by the simple passive movement, "stroking," for instance, shows itself plainly in the increased sensibility.

4. What influence have the movements on the urinary organs and organs of generation?

Several disturbances of these organs are brought on by inactivity. Amenorrhea, dysmenorrhea, menorrhagia and other diseases of women, as well as urinary concretions, cystitis, etc., are more prevalent among persons of sedentary habits.

If the blood-pressure in the portal-venous system is greater than in other parts of the organism, it is quite natural that a sitting posture will increase this pressure, and consequently aggravate disturbances of the pelvic organs.

But it will also be conceded, that properly administered movements will counteract the effects of sedentary habits and totally rectify, or at least check the progress of disease.

Finally. What influence have the movements upon deformities?

According to statistics, the majority of deformities treated by the Swedish movements have been lateral curvature of the spine, and I will therefore take that disease as an example.

The deformity is attributed to various causes, such as necrosis, rachitis, scrofula, atrophy of the respiratory muscles, excessive use of the muscles of one side, weakened muscular action from tight lacing, etc. In every case we find muscular weakness, either as an immediate cause, or as a result of the trouble, which fact accounts for the successful results of the treatment in this special deformity. In cases where muscular weakness is the immediate cause, recovery is speedy, and complete, if the case is taken in hand before the vertebræ have sustained any injury. If a morbid change has taken place in the vertebræ, from one cause or another, the muscles attached to the spine will suffer first, and the weakness will gradually spread until a general collapse of the entire system will result. Movements are here applied with a view to checking the further development of the disease, not only by strengthening the muscles whose function it is to keep the spine in its natural posture, but also by improving the general health of the patient. A full recovery is of course impossible.

The ordinary lateral curvature is either Single or Double. The single curvature generally involves either the entire dorsal and lumbar regions, or the lumbar and lower part of the dorsal. In a very few cases we find the curvature confined to the dorsal region alone. In single curvature the convexity is in most cases towards the left. This

is to a large extent due to the habit of resting upon the right leg in preference to the left. A curvature with the convexity towards the right is often caused by the more frequent use of the right arm and side-muscles, the spine being drawn to the right by the repeated contraction of the muscles. We find upon a closer examination of a single curvature, a smaller curve visible, either above or below, in the opposite direction from the larger one. This small curve will, if the disease is left to itself, give rise to a double curvature. In double curvature the upper convexity takes in most cases a right direction, and the lower a left. As stated before, a single curvature appears more frequently towards the left. In this case the double curve begins in a right direction from the point where the single curve terminates. If the single curve involves the whole of the lumbar and the lower part of the dorsal regions, the double curve begins *above* the original curve. We have also seen that a curvature towards the right is in some cases owing to a more frequent use of the right arm and side-muscles. In such cases the curvature begins in the upper part of the spinal column, and the double curve commences in a left direction *below* the original curve. This explains the ordinary cause of the peculiar form a double curvature takes in the majority of cases.

It certainly seems rational to think that if the spine is curved towards the left or the right, or both, development of the relaxed muscles on the concave side, and comparative rest of the muscles on the side towards which the spine curves, or the convex side, will by degrees bring the spine into its natural position. Massage (French for kneading) is, as before mentioned, placed under the group of passive movements. Its principles are of old origin. The Greeks and Romans were fully aware of its beneficial influences, and it is now so universally known, if not yet practised, that it would be time wasted to speak of it in detail. That it is not more in use, is undoubtedly caused by the scarcity of intelligent operators.

It requires both intelligence and practice to do the massage treatment justice, and there is no doubt but what it has been to a large extent brought into disrepute by persons who, having read or perchance seen some of it, imagine themselves competent to give the treatment. In some cases the Swedish movements have been tampered with in the same manner, but as a matter of course with less success, the principle not being so easily grasped. Massage is in most cases combined with the Swedish movements, but in some instances it is applied alone, as when the patient is unable to take active or duplicated movements, or when daily occupation affords the patient suitable exercise. In some cases again, and these are more frequent, the movements are administered without the aid of massage.

From the above synopsis it will be seen, that the main object of the movement system is to aid nature in its work under favorable circumstances in life, and to take nature's place, so to speak, when our duties in one way or another interfere with its demands.

The general succession of the *modus operanai* is gradual at the beginning, as well as at the end of the course. The treatment is always commenced with movements of a mild form, and by degrees the number as well as the force of the movements are increased. After the disease has been mastered to a decided extent, the number of treatments is gradually decreased. The prevailing idea that a treatment twice or three times a week is sufficient, is a great mistake. We never find a professional oarsman, for example, practise for a race twice or three times a week. He has his regular routine laid out before him, certain time for daily practice, certain diet, etc., and unless he follows this routine, necessary to strengthen his physical powers, he is unfit for his work. On the same principle, the system of the sufferer from chronic disease needs a systematic attention. A deviation from the rules of the treatment is apt to let the disease get the upper hand. Two days' rest will often undo the beneficial effects of one day's treatment. To begin with two or three treatments a week is wasted time and money for the patient, and energy for the operator. I wish to draw attention to two other points on which the system has been misrepresented. In the first place, persons professing to fully understand the system, have promised a cure in a very limited time, in order not to discourage the patient from taking treatment, and thereby loosing an opportunity of earning a few dollars. I have had patients sent me by physicians who have been disappointed if a cure or a decided improvement has not been attained in three or four weeks, and some of these

cases have perhaps baffled the skill of one or several physicians for a considerable time, and they have been advised to try the treatment as a last resort. It is hardly fair to expect that in such cases the system can be built up in a few weeks. It takes, as a rule, a longer period of time for a chronic trouble to develop, so time must be allowed, not only for checking the progress of the disease, but also for recuperation.

The progress of improvement depends largely upon the duration and nature of the disease, the constitution and habits of the patient, etc.

In the second place, these persons have resorted to what they generally term "rubbing," and they make out that this mode of treatment defines the Swedish movement and massage treatment. This is another great mistake. There is more than one way to give massage properly, and as for the Swedish movements, they vary according to the disease, and no two patients out of twenty-five are treated exactly alike.

The following are a few extracts from the reports of the Swedish Movement Institution, in Gothenburg, Sweden :—

Diseases of the heart (functional): cases 10, cured 9, not benefited 1 (organic): cases 49, benefited 42, not benefited 7; defective capillary circulation: cases 7, cured 7; paralysis of all forms: cases 22, cured 7, benefited 15; constipation: cases 36, cured 20, benefited 16; rheumatism: cases 45, cured 14, greatly benefited 31; disordered menstruations: cases 6, cured 2, greatly benefited 4; debility in anemia: cases 67, cured 9, greatly benefited 52, not benefited 6; spinal curvature: cases 62, cured 20, greatly benefited 33, not benefited 9. Those not benefited were mostly irregular attendants.

I am fully convinced that the time is not far off when the medical profession in Canada, as in Europe and the United States, will profit by the aid of the movement system, not only in cases of chronic disorders, but also in cases of convalesence.

THE OLECRANON PROCESS SUCCESSFULLY WIRED.

BY N. E. MACKAY, M.D., M.R.C.S. ENG., ETC.
Surgeon V. G. Hospital.

W. G., aged 20, single, a lumberman, was admitted into the P. and C. Hospital on the 8th day of September, 1886, suffering from an ununited fracture of the olecranon.

Previous history.—About ten weeks before being admitted, the patient while walking over a tumbled-down wharf, suddenly fell through a hole in it, and in falling, his elbow struck against a plank, producing fracture of olecranon process. The patient on getting up found the power to extend the arm very much impaired. The joint was very painful and swollen for some time after. He at once went to a "bone-setter," who told him the elbow-joint was dislocated and gave his arm a few wrenches and assured him the dislocation was reduced, and that in a few days he would be able to use the joint. In the meantime the arm was put up in a flexed position, but finding no improvement taking place, it was left in this position for five or six weeks. The patient feeling discouraged that no improvement had taken place, now consulted a doctor, who told him the olecranon process was fractured, and put the arm up in the straight position. This treatment was continued for two weeks, after which he made up his mind to come to the hospital.

Condition when admitted.—On examination the olecranon process was found fractured, and a distance of about one-eighth inch between each fragment in the extended position of the arm; but in the flexed position the bones were fully one and one-fourth inch apart, and there was no attempt at union of any kind. The circumference of the joint was fully one inch larger than its fellow and the power to extend the arm was much impaired. There was slight effusion of fluid into the cavity of the joint. The patient's general health was very good. A consultation of the medical staff of the hospital was held on the 12th, at which an operation was determined upon.

On the 14th I performed the operation of wiring the olecranon, in the following way, viz.:—The patient being etherized and an Esmarch bandage applied and the parts thoroughly washed in carbolic solution (1-20), I made a vertical incision two and one-half inches long, over the most prominent part of the olecranon process, beginning about an inch above its upper border, and carefully removed the soft structures from the ends of the fragments.

On exposing the bone, I found the fracture extended downwards and forwards from the

posterior aspect of the olecranon to its base, and no attempt at union of the fragments. The soft structures being now held well apart by two assistants, I removed a very thin slice of bone, with a Hay's saw, from the broken surfaces of the two fragments and then drilled two holes in each of them from their periosteal surface. The oozing of blood being stopped, I washed the wound thoroughly with bichloride solution (1 to 3,000) and then brought the vivified surfaces of the fragments together and held them there with platinum wire. There was no drainage tube inserted in the joint, but a catgut drainage was placed in the wound in soft parts. The edges of the wound were brought in position and held there by catgut sutures and a Lister's dressing was applied. The arm was then put up on a well padded straight anterior splint. The operation occupied an hour and a quarter in its performance, and was done under a spray of carbolic acid and with strict antiseptic precaution. On the evening of the day after the operation his temperature ran up to 100° F., but was normal on the second day and remained normal until the evening of the fourth day when it again rose to 100° F. This day he complained of pain at the bend of the elbow, and on removing the dressing I discovered a large swelling over the upper end of radius and external condyle of humerus (radio-humeral articulation), but the wound looked very well. An ice-bag was kept over the swelling for three days and nights in succession. From the 18th day to the 21st, his temperature ranged from 99° in the morning to 101° in the evening. On the 21st, the seventh day after the operation, the stitches were removed, union having taken place by first intention. On the 20th of October the fracture was found firmly united by bone. On this day active and passive motion, together with stimulating liniments, friction and shampooing were commenced with and continued until the natural movements of the joint were completely restored. On the 18th December, when he was allowed to go home to spend the Christmas holidays, he could touch his forehead with his hand easily. But before leaving, he was instructed to exercise his arm well, while away, by chopping wood. On the 9th January, 1887, he returned to hospital with all the movements—flexion, extension, induction and supination—completely restored. On the 12th, I removed the wires, and on the 25th he was discharged completely cured.

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Correspondence

OUR NEW YORK LETTER.

THE BULKLEY CLINIC — WHITEHEAD'S OPERATION FOR HEMORRHOIDS—THE MEETING OF THE OTOLOGY AND LARYNGOLOGY SOCIETY.

NEW YORK, Nov. 21st.

One of the very best skin clinics in New York is the Bulkley Clinic, held in New York Hospital once a week by Dr. Bulkley, of this city. There is plenty of material, and the doctor is careful to select good cases, while his splendid collection of wax preparations helps him to show the differential diagnosis. The clinic is for practitioners only, who show their appreciation by crowding the room an hour before the appointed time in their efforts to get a good seat. At his last clinic the doctor showed a case which is not at all uncommon, but which is very untractable to treatment, namely, a case of onychia hypertrophans. This disease is a thickening and hardening of the nail matrix, generally found in women, particularly those who have to work hard. The cause is partly some general dyscrasia, usually caused by disease of the liver or kidneys, and partly some local affection. The symptoms are a gradual thickening of the nail matrix; the nail is raised and looks rough and ragged, while some are broken off, but in no case do they suppurate and slough, which diagnosis this affection from suppurative onychia and onychia syphilitica. Dr. Buckley treats this affection both locally and constitutionally; the local treatment being to dip the fingers, every night, in and out of water as hot as can possibly be borne, for at least twenty minutes, or alternately from hot to cold. The object is to get the shock and reaction. The nails are then covered as far back as the roots with a thick coating of diachylon ointment, and wrapped in lint. In the morning this is washed off, and a simple dressing applied during the day. This may have to be kept up for days and sometimes for weeks. By these means the hardened mass can be scraped off, and a healthy action set up. The constitutional treatment resolves itself into correcting any visceral derangements and giving some tonic, preferably arsenic with some of the alkaloids.

Since Whitehead of Manchester published his

successful operation for hemorrhoids a few months ago, it has been tried several times by surgeons of this city. The operation was described by Whitehead in the *Brit. Med. Jour.*, for June of this year, with statistics of 300 cases on which he has operated. It consists in dividing the mucus membrane where it joins the skin completely around the anus and dissecting it from the muscular coats of the rectum up beyond the pile area, and cutting it off. The upper part of the mucous membrane is then drawn down and stitched firmly to the integument and so covers the denuded part (See CANADA LANCET, Sep. '87). Dr. Weir, of the New York Hospital, has performed this operation twice within the last month, and in both cases got good useful ani, with little danger of the recurrence of piles and no danger from stricture of the rectum.

At a meeting of the Otology and Laryngology Society this evening, a paper was read by Dr. J. W. Gleitsman on "The Hypertrophy of the Tonsil of the Tongue, with History of Cases." The tonsil of the tongue is the name given to a mass of lymph follicles, found in the lingual fossa, just anterior to the epiglottis; it is a ductless gland, continuous with a chain of lymphatics which run across the pharynx and connect with another collection of follicles at the pharyngeal opening of the Eustachian tube. Dr. Gleitsman believes the collection in the lingual fossa to be histologically the same as the faucial tonsils, and, therefore, calls it the lingual tonsil. However, the practical point is, that this, like all other glandular tissues, may enlarge and cause a great deal of disturbance. It may cause simply a little mechanical irritation in the throat when eating or speaking, or if it is large enough to press on the epiglottis, it causes disturbance in speech, violent fits of coughing, dyspnœa, and globus hystericus, and has been known to bring on regular asthmatic attacks. The singing voice is markedly affected, the singer not being able to use the voice as much as formerly, as long use causes pain; the notes cannot be sustained and there is often a break in them.

Dr. Jarvis, who first described this growth in 1884, thinks it is often caused from a wrong principle in teaching singing; in some of the notes the tongue is made to arch posteriorly, a most unnatural position. He found these glands enlarged in every member of a class of thirteen of a certain singing-master in this city. The diagnosis is easily made. In all cases of laryngeal irritation the upper part of the larynx should be examined as well as the interior, and if these growths exist they will be seen on the root of the tongue, in the lingual fossa, just anterior to the epiglottis. The treatment he practises is the same as for adenoid growths in the pharynx. Vienna paste, silver nitrate fused on a wire, or better than all, is the galvano-cautery. Lunar caustic should only be used when the growths are soft, but the doctor raises a warning note against the destruction of all these growths, for some of them disappear without treatment, the same as enlarged tonsils or turbinated hypertrophies.

Dr. Delavan cited two cases of very severe hemorrhage after tonsilotomy in the adult, both of which he accounts for from the fact that the tonsils contained a great deal of hard, fibrous tissue, which mechanically prevented the contraction of the divided arteries. In the discussion which followed, it was shown that tonsilotomy is contra-indicated in all cases where the tonsil is round, and even in outline and firm in consistence, which shows that it contains a large proportion of fibrous tissue. In the hemostatics suggested in cases of hemorrhage, a novel idea was brought out, namely, that the surgeon should have ready a muslin bag, about the shape and size of a small sausage, filled with a good astringent, say alum; this can be used for pressure, while there is a constant astringent being supplied through the muslin.

CANUCK.

To the Editor of the CANADA LANCET.

SIR,—My attention has been called, during the past few months, to the existence of a worm in the flesh of the codfish caught on the coast of Nova Scotia. This worm is generally found in the fleshy part of the back, near the backbone, towards the head. In a fish weighing about two pounds, caught the other day, and sold to me perfectly fresh, I discovered nearly two dozen. This parasite is found rolled up like a coil of rope, with one end (the head I presume) pointing upwards on a level with the coil. In shape it appears to be similar to the earth-worm. When alive in the flesh of the fish, its color is similar to that of the flesh; but when taken from the flesh, it assumes a reddish-brown color. The bed in which it is found is covered with mucus, and the flesh around it is apparently in-

flamed. In length it varies from one to five inches, while it is about as thick as an ordinary darning-needle. I have submitted several specimens of this worm to the medical practitioner of this place. He examined them and finds that this worm is pointed at both ends and has a body in shape like the ordinary eel. When it is placed in a tumbler, or any other vessel, its movement is exactly like that of the earth-worm.

Even after the process of cooking, life is still clearly shown, but there is less activity than when taken fresh from the fish.

I should like to call the attention of some scientist to the subject, and ask:—Are such fish fit for human food? How can we account for the existence of such a worm in the codfish? What the worm really is, and how is it to be classed?

Perhaps some reader of the LANCET may have had a similar experience with myself. They have existed for years, because our medical practitioner remembers seeing them when a boy—twenty years ago. However, I cannot hear that any notice has been taken of the matter up to this date.

JAMES SPENCER,
Rector of Petite Riviere.

Nova Scotia, Oct. 25th, 1887.

Reports of Societies.

MEETING OF THE ONTARIO BOARD OF HEALTH.

Nov. 1st and 2nd, 1887.

After minutes of last meeting were read and confirmed, Dr. Bryce's motion, *Re* Diphtheria and Typhoid, was received as the report of the Committee on Epidemics.

Moved by Dr. Covernton, seconded by Dr. Macdonald,—That Dr. Cassidy be appointed associate delegate with Dr. Oldright, to represent the Provincial Board of Health of Ontario at the thirteenth session of the American Public Health Association, convened at Memphis, Tennessee, for November 8th of the present year.—*Carried.*

Dr. Bryce read the report of the delegates to the International Conference at Washington. The report was adopted on motion of Dr. Bryce, seconded by Dr. Covernton.

Dr. Cassidy referred at some length to the fact that Dr. DeWolfe, of Chicago, and others have found clothing from infected parts in Italy, which had passed ocean ports uninspected. He thought that local attention should be drawn to the matter. It was then moved by Dr. Cassidy, seconded by Dr. Macdonald,—That in view of the disclosures made by Dr. DeWolfe, Medical Health Officer of Chicago, about clothing from Palermo having been introduced into Chicago, thus exposing the people of that and other cities to the danger of infection, this Board would draw the attention of medical health officers in Ontario to the fact, and desire them to take the necessary steps to prevent similar dangers to those within the field of their own jurisdiction.—*Carried.*

Moved by Dr. Yeomans, seconded by Dr. Cov ernton,—That the Provincial Board of Health, now assembled, desires to draw the attention of the American Public Health Association to the rumors circulated through newspapers, to the effect that cases of cholera have been reported in the New York official bulletin as measles; and also, that articles of clothing packed in Palermo and exposed to cholera infection, have been distributed at various points in the country without having been subjected to disinfection at New York, In view of the fact that such reports create uneasiness and apprehensions of danger in the public mind, this Board requests the Provincial delegates to bring the matter to the notice of the meeting of the American Public Health Association at Memphis, on the 8th instant, in order that enquiries be instituted and the accuracy of said reports ascertained.—*Carried.*

Moved by Dr. Macdonald, seconded by Dr. Cassidy,—That the report of the Committee on Epidemics be received and adopted, and that the committee be instructed to draw up a form of regulations, to be forwarded to municipalities, in relation to Milk Supply and Milk Inspected, with recommendations for the adoption of those regulations.—*Carried.*

After some other routine business, the meeting adjourned.

Selected Articles.

UTERINE FIBROIDS AND OTHER PELVIC TUMORS.—THE CONDUCT TO THE MENOPAUSE.

A large number of the cases of uterine fibromata and analogous growths, though apparently more or less rapidly approaching from bloodlessness, or other circumstances connected with the growth, a fatal degree of exsanguination,

are not in a condition that would justify abdominal section for either hysterectomy or oöphorectomy with or without salpingotomy. Other subjects, when candidly informed of the discouraging statistics of the one, and of the mutilation and barrenness of the others, absolutely refuse to submit to these operations, or withhold their consent until the period of even the forlorn hope they offer has passed; and yet another class with tumors of varying size, location and histology, are of an age to regard the hope offered by the approach of the menopause as a promise of ultimate relief in the decadence of vascular and trophic activity so universally recognized as an attendant on post-menstrual life.

These later cases, as may be seen in the following quotations from Keith, have good ground and encouragement for resisting both hysterectomy and oöphorectomy as well as salpingotomy, any of which operations indeed, in my own opinion, are seldom justifiable at that age, though this as it seems to me, appears to be the only period of life at which the two latter procedures have been able to claim any marked success in arresting the menstrual nisus and flow.

"To the woman with a fibroid uterus," says Dr. Keith, "who has passed the best of her years in weariness and pain, middle age brings relief, and old age may be spent in peace. Hence the difficulty in knowing how far we are justified in advising interference for a disease that troubles for a time, though it rarely kills. It is often said that the operation for the removal of uterine fibroids is in much the same position now that ovariotomy was five and twenty years ago. It is not so. It never will be so. The history of these two diseases is entirely different. As a rule, ovarian disease is a merciless one; it goes on and kills. As a rule, the active existence of an uterine fibroid is limited; it rarely interferes directly with life. When menstruation ceases, the troubles of the patient soon begin to pass away, while the tumor itself, after a time becomes smaller, and in a few years little or no trace of it may be found. The patient gets along, lives more or less comfortably, generally not even aware of its existence, and dies of something else. * * * * They have not much to gain by chancing a dangerous operation, and they may lose much, having much to lose.

"Till of late years, uterine tumors were let lie undisturbed unless when they were mistaken for ovarian cysts; but the restless surgery of to-day will let nothing alone; it has no patience for the menopause, and would attack all and sundry in some way or other, till one almost begins to think that individual responsibility has become old-fashioned and gone out of date. So far as operations for the cure of this disease have yet gone, the mortality is out of all proportion to the benefits received by the few. * * * *

"Dr. Bigelow, of Washington, has lately collected all the cases placed on record up to March, 1884. At best, this must be an imperfect list, and can only show the least bad side of the operation. Of 359 operations there were only 227 recoveries and 132 deaths, or a greater mortality than one out of every three operated on. * * * The sum of misery in the 359 operations to the subjects of them, and to their friends, is something simply incalculable. So far as hysterectomy has thus gone, it has done more harm than good, and it would have been better that it had never been."

Though I have thus quoted from Dr. Keith, as one of the highest, and perhaps the latest authority on uterine tumors, such principles as are in accordance with my own views and the objects of the present paper, it would be injustice to him to leave the impression that hysterectomy is banished from his surgery. On the contrary, though he so strongly condemns the operation in cases offering the possible chance of relief, by the limitation of the menstrul life of the subject, his record in cases forlorn of this hope—and these are his only admitted ones—has been marked by successes the most brilliant, and sometimes wonderful to contemplate. Unquestionably then, the menopause must be regarded as the great crisis in the life, activity and growth of the great majority of pelvic tumors, but especially of the uterine fibromata, and of the softer non-malignant growths of this organ. Whatever methods of management have been found to sustain the life of the patient, and in any measure to lessen the exhausting hemorrhage, or to retard the growth of the abnormity until the advent of this period of reprieve, are certainly worthy of our careful consideration. All the several classes of cases just mentioned, viz., those which cannot, those which will not, and those which ought not to be operated on by abdominal section are known—many of them—besides the burthen of the growth, to be subjected also to the most profuse, alarming and exhausting hemorrhages. Their pale and œdematous faces, their dropsical limbs, their oppressed and gasping respiration, and the tumultuous action of the feeble heart tell us, at a glance, of a stage of exsanguination almost incompatible with continued existence. In profound interest, not unmixed with alarm, we debate in our minds the momentous question: "Can she hold out, to reach the longed-for goal of her relief?" Wide observation in regard to many subjects even in the extreme condition here represented, endorses the answer given by Keith: "Even in the worst of them, the chances are that they will live on—not in comfort, certainly, some perhaps in misery—but still they will live, and not die."

Few women with uterine non-malignant and pelvic growths have applied to me in the past thirty years, and more especially where bleeding

and atonic conditions were involved, who have not been placed with marked benefit upon the treatment herein reported. In the large majority of these cases the blood-losses were greatly diminished and a better condition of health and strength secured; in many the rapidity of the growth was obviously retarded, while in a few the diminution and final removal of the tumors seemed to be the happy result of the continued medication.

In condensed statement, I may say that the iodide of potassium in combination with tartrate of iron and potassa, and ergot in combination with quinine—these agents being persistently continued, constitute the *basis* of the medicinal treatment referred to.

At the present time, the following is the preparation used:

R. Ferri et potassæ tart., ... ℥vj
Syrupi. . . . . ℥viij.
M.

R. Potass. iodidi, ... ℥vj.
Elixir. simplicis (vel aquæ). . . ℥viij.

M. S. Take one or two teaspoonfuls from each vial three times a day in half a glass of water, before or after meals.

In addition to the above, I seldom omit, whether the cases are marked by excessive hemorrhage or not, to place the patient upon the following combination:

R. Quiniæ sulph., ... ℥ij.
Ext. ergotæ solid, ... ℥iss.
Mix and divide in forty pills, cover with capsules
S. Take one pill twice daily.

In the submucous variety of uterine fibroids—intra-uterine polypi—metrorrhagia is frequent and profuse, or it may be constant and in a milder flow, but the subjects are always anæmic, somewhat dropsical, with heart and lung perturbation under the least fatigue.

The indication in such cases, is not so much to check the growth, or to diminish the size of the tumor, as it is to check the hemorrhage, rehabilitate the blood and promote the expulsion of the fibroid from the uterus, that it may be removed by operation.

In this class of cases I therefore eliminate the iodide of potassium from the treatment, and place the patient on the following:

R. Ferri et potassæ tart., ... ℥iij.
Extract ergotæ solid, ... ℥ij.
Quiniæ sulphat. . . . . ℥ij.

M. and divide in forty pills. Take one pill morning and noon, before eating.

Under the above treatment the tumor is expelled into the vagina in from two to six weeks, the metrorrhagia greatly diminished or arrested, the complexion and strength improved, while the patient is put in better condition for the operation, whether by ligature, ecraseur or excision. In these cases of course, the expulsive efforts of the uterus are principally promoted by the ergot, but to the quinine, besides its action as a general tonic. I attribute a material influence in giving steadiness and persistence to the uterine muscularity. Its effects also on the middle or muscular tunic—of unstriped fibre—of the arteries, is similar to that of ergot on the uterine muscle, constructed of the same kind of fibre. By this same physiological action, and its attribute of lessening the morbid supply of blood to the growth, I believe it to be valuable in checking the increase of the subperitoneal fibromata, as well as that of other tumors and infarctions within the pelvic cavity unconnected with the uterus.

The considerations heretofore presented have had in contemplation, women in the middle and later stages of menstrual life, who have been discovered to be the subject of uterine and other pelvic growths and suffering from the disturbing and exhausting result attendant upon their presence and advancement. This is the period at which most of these tumors come under the purview of the gynæcologist and general practitioner. It is the period of greatest activity of the growth, of the most frequent and abundant hemorrhage, and of the greatest exhaustion and danger to the woman. From this time to the completion of the menopause, all expedients are exhausted to check the hemorrhage, to sustain the vitality of the patient, and to prop her in her staggering journey towards the goal of her relief. This is the period, too—treatment having been neglected or failed to stay her downward progress—when abdominal section with the view to oöphorectomy, extirpation or hysterectomy, can not unwarrantably, be debated; but as I think, always only as a last and desperate resort.

It is in view, as I have said, of cases in this stage of menstrual life, that I have endeavored to formulate and systematize from the records of a somewhat extended experience, a persistent course of medication and management, that may serve to sustain and guide the woman through the bight and narrows of the most perilous strait in the progress of her disease. I will here distinctly state that the treatment is not instituted with the expectation of removing the enormous growths and uterine fibroids that distend the abdomen, but for rendering them less burdensome; not with the expectation of entirely arresting or preventing the hemorrhage, but rendering it less profuse and exhausting; not with the expectation of restoring health, but for rendering disease, dire and dreadful, more endurable. I do not remember ever to have known a simple or multiple fibroma of the uterus to directly cause the death of the subject, but in the low condition of exsanguination caused by the hemorrhage and irritation of

fibroids, I have seldom failed to realize marked improvements in the general condition of the patient, and in many cases I have observed what appeared to be a notable retardation in the increase of the growth. In several pelvic and abdominal tumors of both men and women, unconnected apparently with the uterine apparatus, I can report decided benefit to the general health and marked reduction and even disappearance of the tumor, on prolonged use of iodide of potassium in combination with tartrate of iron and potassa. Of course, there are some cases of pelvic tumors or infarctions in which, while this or something similar may be the only *rational* medication practicable, yet, no reasonable expectation of relief can be entertained. Were I to endeavor to formulate *principles* from the foregoing consideration, and from my own observation and experience, the following may perhaps be legitimately stated:

1. A large proportion of uterine fibromata and other pelvic tumors outside the ovarian cyst, are not properly the subjects for surgical treatment, either by hysterectomy, oöphorectomy, salpingotomy or excision.

2. Though these growths, especially the uterine fibroids, seldom *per se*, destroy the life of the subject, and are limited in the duration of their injurious influence, they yet impose upon the woman a prolonged period of depression, exhaustion and ill health, during which period she is liable to succumb to intercurrent invasions of disease before the establishment of the menopause, or the time of expected relief.

3. A systematic and persistent therapeutic course, rationally adjusted to the nature and condition of the disease is highly desirable.

4. From the known physiological effects of ergot in combination with the salts of quinine, and of iron, with iodide of potassium, and in view of the results above presented, we may regard such a combination as rationally applicable, during the prolonged period of hemorrhage and exhaustion so frequently marking the progress of these pelvic growths.

5. While such medication cannot be expected ordinarily to remove large fibroids, or materially arrest their advance—it exercises marked influence in diminishing the blood-losses, and in improving the nutrition and general health of the subject of such tumors; and in some rare instances, apparently in younger subjects, it results in the entire disappearance of the growth and its deplorable concomitants.

6. In view of the danger of impaction, much pain being often produced from this cause, with increase of bleeding, a womb with growing fibroids should be frequently lifted out of the cavity of the true bony pelvis, by nightly self-replacement in the knee-breast posture.—Dr. Campbell in *New Orleans Med. and Surg. Jour.*

QUESTIONS IN THE TREATMENT OF INEVITABLE ABORTION.

There are differences of opinion and also of practice in regard to the treatment of inevitable abortion, and especially of that form in which the expulsion of the ovum is incomplete. A brief discussion of some of these differences may not be unprofitable.

It is in many cases difficult, if not impossible, to know that the abortion is inevitable. If the hemorrhage be marked, and fragments of decidua are expelled, or if the ovum be felt at the os, the cervical canal having been so far dilated as to permit its descent, a conclusion often verified by the event may be made, that the pregnancy must be interrupted. And yet these symptoms do not justify the conclusion. For example, I have seen a patient at the third and also at the fourth month of pregnancy, have so profuse a discharge of blood from the uterus that a dozen napkins were required in twenty-four hours, and at times one of these napkins was saturated with blood; nevertheless, the pregnancy continued.

In general, it may be said that only in case the embryo or fetus is dead, and a free rupture of the membranes has been made, or their extensive detachment effected, can the abortion be declared inevitable. The recognition of the death of the fetus is possible if its life has been previously made known by auscultation; for, having once distinctly heard the sounds of the fetal heart, and then failing to hear them again after careful and repeated examinations, the just conclusion is that the fetus is dead. But in the majority of cases this evidence is not available, for the threatened miscarriage is present before the throbbing of the fetal heart can be heard. A free rupture of the amniotic sac certainly will be followed by abortion; whether a mere puncture with only partial evacuation of the contained fluid will then result in all cases, may be considered doubtful; for certainly not only cases of spontaneous rupture of the membranes, and also those of their puncture, in the latter weeks of pregnancy without labor coming on for some time after, have been observed. Even though the membranes have been punctured, or spontaneous rupture has occurred, the fact is in most cases not known to the practitioner. Again, it is rarely that he knows that large detachment of the ovum from the uterus has been made; while such detachment results in hemorrhage, yet, as before indicated, this symptom may occur and the pregnancy continue. There are two proofs that the abortion is inevitable, which are available in those cases in which the two essential symptoms, viz, uterine contractions and flow of blood, continue for two or three weeks or more, and these symptoms are, arrested development of the uterus and retrograde changes in the

mammary glands. Now that the method of bimanual examination as a means of obstetric and gynecological diagnosis is so familiar to the profession, it is not necessary to more than refer to it as available for the recognition of arrest of that increase of size of the uterus resulting from the pregnant condition; in other words, if this organ ceases to grow, the embryo or fetus is dead. Again, if the enlargement of the breasts, which usually begins at the first menstrual absence following conception, has occurred, and these organs from having been full, plump and possibly the seat of occasional pain, become shrunken, flaccid and painless, it may be regarded as almost if not quite certain that the pregnancy cannot continue. Here let a word of caution be said. In some cases, by no means frequent, it happens that the breasts after increasing in size in the first months of pregnancy lessen somewhat, and remain thus only partially developed until after labor. But this fact is not frequent, and the condition of the mammæ is by no means that which is observed following the death of the embryo or fetus.

In threatened abortion we have no two remedies comparable to rest and opium; these are also invaluable in case the miscarriage is inevitable, and many observations have led to the conclusion that the pregnant woman bears opium remarkably well. By this means we lessen one of the dominant symptoms, pain, and indirectly by slowing the circulation, hemorrhage. But the means of especial value as a uterine hemostatic is hot water injected into the vagina; of course the injections should be copious, and given if the discharge be great, at frequent intervals. One advantage that this treatment presents in abortion is, that it may be employed in cases in which there is hope of continuing the pregnancy—it does not excite uterine contraction so much as it does contraction of the blood-vessels. By these injections possibly we will render unnecessary in the majority of cases the administration of ergot or the application of the tampon; nevertheless ergot and the tampon are means which may become essential in the treatment, and they are probably most efficient if used conjointly.

Antiseptic vaginal injections should be used twice daily during the continuance of the abortion.

Of course if notable hemorrhage persists in spite of hot water, opium, ergot and the tampon, the indication is plain to empty the uterus by manual or by instrumental means, following the removal of the ovum by antiseptic applications—*e. g.*, injections into the uterus of a 5 per cent. solution of carbolic acid, or of 1 to 2,000, or 3,000 corrosive sublimate solution, or swabbing the intra-uterine surface with one of these solutions, or with the tincture of iodine, or the introduction of an iodoform tampon. Here let me say a word in regard to the effort to reject corrosive sublimate as an antiseptic in obstetric practice, in consequence of mercurial poisoning having occurred in a few cases. In only two of many cases in hospital practice in which 1 to 2,000 corrosive sublimate injections into the vagina and into the uterus were employed, have I seen unpleasant consequences result; and these consequences ceased upon discontinuing the remedy. I believe if the uterus and vagina are thoroughly emptied after the injection, none of the fluid being left behind for slow absorption to occur, by following it with an injection of water that has been sterilized by boiling, no injnrious results will be seen. Nevertheless, it is advisable in all cases where corrosive sublimate solution is used, either in connection with abortion or after labor, to observe from day to day the gums, and the moment these are found red and swollen to at once discontinue the solution.

As to methods of emptying the uterus in incomplete abortion, that in which only one or two fingers, first carefully made aseptic, are employed is the best; the patient lies upon her back and the physician places one of his hands upon the abdomen to press the uterus down to the fingers of the other hand, so that they more readily enter its cavity. If instrumental means be required, my preference is for Emmet's curette forceps, if the abortion be within the first ten weeks of pregnancy; many, however, employ a blunt curette.

I hold, too, that evacuating the uterus is clearly indicated in incomplete abortion, not only by such hemorrhages as have been mentioned, but by an offensive discharge, for such discharge may fortell septic infection. Many excellent authorities, more especially of the German school, advocate immediate emptying of the uterus in all cases when a part of the ovum remains. Now the objections to this are: First, there may be a twin pregnancy, and one ovum may be expelled and the other retained until complete development is accomplished, and thus the operator in assisting one abortion makes a second one. Second, there is danger of causing a traumatism either in the dilation of the cervical canal, or by the use of the curette upon the uterine wall. Third, it should be remembered that the uterine decidua, the *decidua vera*, is not fused with that covering the ovum until some time in the fourth month, but is quite firmly united to the uterine wall; abrupt detachment of it is a violence which may produce more serious consequences than those which result from its gradual breaking down and discharge, nature's method of casting it off.

Let it be called conservatism, if anyone chooses, nevertheless my faith and practice are in cases of incomplete abortion to wait, if the os be closed, until the symptoms which have been mentioned occur—without one or both of these, no interference, but an armed expectation and the regular use of antiseptic vaginal injections. It is worthy

to be observed that the advocates of immediate interference sustain their position by adducing instances in which continued hemorrhages, or offensive discharges, or even septic infection, followed delay in emptying the uterus. Certainly, and cases presenting such symptoms demanded earlier interference; if the practitioner had been wise enough to be warned by the first two, and proper response was made to the warning, the third would scarcely be known. The multiplication of cases of early incomplete abortion in which hemorrhage persisted for weeks, and then fragments of membranes or of placenta being removed the patient got well, do not prove that the practice of immediate interference, that is the artificial complete removal of the ovum is demanded in every case of abortion in which spontaneous expulsion does not occur. Certainly there are advantages in a prompt and perfect deliverance, but it is not exempt from dangers if violence is used in effecting it, and in some instances it may abruptly end a pregnancy which in other practice might continue to its normal termination. The advocates of immediate interference claim the best results. Carlyle has said, "Granted, the ship comes into the harbor with shrouds and tackle damaged; the pilot is blameworthy, he has not been all-wise and all powerful; but to know *how* blame-worthy, tell us first whether his voyage has been round the globe, or only to Ramsgate and the Isle of Dogs." So we would like to know the number of cases treated in this particular way prior to giving an opinion as to its value. Further, before the question can be finally settled, a sufficiently large number of cases thus treated must be compared with a like number in which no interference with the process, so far as the uterus is concerned, is made without symptoms require it. Of course at the time of the miscarriage make it complete if possible without injury to uterus—let the interference be digital rather than instrumental, unless the former fails and hemorrhage persists; but that time past and part of the ovum being retained, the os closing, I believe it better to wait until distinct call for action is given. There is a middle ground between immediate intervention and absolute expectancy; and in that ground, my faith is, the path of safety lies.

One of my most valued professional friends, an able, conscientious and distinguished practitioner, in reference to this special view of the treatment of abortion, as well as the management of labor, has written me that my methods are too artificial and I do not trust enough to nature, adding, that in a practice of fifty years—and I know that during a great part of that time his practice has been large—he has not lost a single woman as a consequence of labor or from miscarriage. I do not know, but it is quite probable that this gentleman has attended 2,000 cases of labor, for as the result of observation and of inquiries my conclusion is that the general practitioner, even if his practice be large, does not have more than an average of forty cases of confinement a year. Of course there are exceptions, some devoted exclusively to obstetric practice, or connected with maternities, or having a large *cliéntele* of the poor, or at least of those in very moderate circumstances, may count in the course of their professional lives three or four thousand obstetric cases. But for one who can thus number his cases, there are ten who are under the average that has been mentioned. If one were to take the extravagant and improbable statements of some few physicians who, we will suppose, guess at a number and multiply it by two so that nothing shall be lost as to the number of labors they have attended, and then make it the standard for the profession in general and for midwives, the population of this country would be increasing in such a frightful ratio that Malthus would not rest in his grave, or else there would be a slaughter of infants in comparison with which that by Herod was infinitesimal. In this department of obstetric statistics I believe there are more unfortunate mistakes than in any other.

Returning from this digression, the number of abortions attended by one who has had charge of 2,000 cases of labor will be not less than 250, or according to some estimates of the relative proportion between misscarriages and labor at term, even 600 or 700. Bush's proportion is 1 to 5.5; Whitehead's 87 out of 100, and Hegar's 1 to 8. Taking the smaller of the numbers mentioned, there certainly is a strong argument for the expectant treatment of abortion in the fact that 250 thus treated recovered.

But I do not want to urge such treatment as invariably the best, for expectation has its limits, the definition of which this paper has endeavored to present.—Dr. Theophilus Parvin, in *Medical and Surgical Reporter*.

PRACTICAL POINTS IN THE SELECTION AND ADMINISTRATION OF ANESTHETICS.

Analysis: (1) The best method of administering nitrous oxide and ether in combination or succession; (2) the prevention of vomiting during or after the administration of an anesthetic; (3) the danger of inducing general anesthesia in patients suffering from obstructive dyspnea; (4) the possibility of dangerous symptoms occurring from the exhibition of morphine or opium prior to the administration of ether or chloroform.

1. It is taken for granted that ether, preceded by nitrous oxide, is the best anesthetic for the

bulk of cases in general surgery. The preliminary administration of nitrous oxide is especially to be recommended in muscular, alcoholic, nervous, or excitable patients. Atmospheric air should be rigidly excluded during the inhalation of the nitrous oxide; ether vapor should be *gradually and increasingly* admitted when the signs of nitrous oxide narcosis commence to appear, and, when much epileptiform movement occurs, a small quantity of air should be allowed. A portable apparatus, by which it is possible to administer these anesthetics in the manner advised, is manufactured. The sudden transition from the inhalation of nitrous oxide to that of strong ether vapor is not desirable. By the above method, coughing, excitement, inhibition of breathing, and struggling are prevented.

2. Vomiting during the administration of an anesthetic is usually to be prevented by rapidly and thoroughly anesthetizing the patient, the diet having been previously regulated. Deep narcosis having once been established, reflex acts should be carefully watched for. Among these, deglutition is often an important indicator of incipient coughing or vomiting, and if it occurred the administration should be pushed. The chances of vomiting after the administration can be lessened by the above means; in addition to this, the swallowing of mucus or blood should be prevented by keeping the patient's head upon its side. The patient should be moved as little as possible after the operation. Experiments with cocaine (in aqueous solution administered before the operation) have been made, but it is difficult to say whether it had answered its purpose.

3. It is questionable whether any anesthetic should be giving to patients suffering from obstructive dyspnea. In a case in which a large innominate aneurism pressed upon the trachea, and which was rapidly enlarging, an operation was decided upon. Previous experiment had shown that digital pressure upon the subclavian and carotid arteries did not materially increase the dyspnea. Chloroform was cautiously given. After the ligature of the carotid the breathing became feeble, and, after the other artery had been tied, it ceased and could not be restored by artificial means. It was probable in this case that the nervous mechanism of respiration, doubtless somewhat exhausted before the operation, could not be sufficiently stimulated during anesthetic sleep by the imperfectly oxygenated blood. Artificial respiration was ineffectual, although, before the operation, the chest and abdominal movements were perfectly competent to maintain the due oxygenation of the patient's blood. Another case of a similar nature, and with an equally untoward result, had been reported to the author; and in future he would certainly refrain from administering an anesthetic to such patients.

4. The sedative effects which opium or morphine exert upon the respiratory system should certainly contra-indicate their employment in cases in which respiratory embarrassment or failure would be likely to occur. Professor Victor Horsley has advised the subcutaneous injection of morphine in cerebral surgery; and the injection of morphine with atropine before the administration of a general anesthetic, has been adopted by many surgeons upon the continent. The practice, however, was one which should be followed with the greatest caution, and in many cases altogether avoided. In illustration of this may be cited the following remarkable case, in which it seemed probable that the cessation of breathing which occured was partly or wholly to be attributed to morphine thus administered. The patient was a young woman who presented unmistakable symptoms of a cerebral tumor in the cortex of the brain. When prepared for operation she was semi-comatose and hemiplegic; the corneal reflex was well marked; her pulse was 90, weak but regular; her respiration was feeble. A hypodermic injection of morphine was given, and the administration of the anesthetic (a mixture of four parts of chloroform to one part of alcohol) was commenced with a Junker's inhaler. Very little of the anesthetic was needed (one drachm throughout). As the operation proceeded, respiration became more and more feeble and then ceased. It was restored by artificial means, but again ceased and was again restored. One hour and a quarter after the commencement of the operation it ceased for the third time and could not be made to return. Artificial respiration was then kept up (with occasional intermissions to see whether automatic breathing would return) for *four hours*, during which time the operation was successfully completed. After four hours, automatic breathing re-commenced, but ceased not very long after (about two hours), and the patient died. The probable explanation to be given of such an occurrence is this: the respiratory nervous mechanism, already much enfeebled, and possessing like the rest of the nerve tissues but a very limited store of energy, was rendered less capable of emitting those impulses upon which depended the respiratory movements of the patient, by reasons of the sedative drug introduced into the system. There was no reason to accuse the anesthetic; for the cessation of respiration was not like that observed in chloroform poisoning, and when artificial respiration has re-established automatic breathing in the latter condition, recovery invariably ensues in the absence of complications. The manipulations to which the brain was subjected, or the loss of blood which necessarily took place, might have exerted some influence; but from the general considerations of the case, and from the knowledge of the dangerous effects which morphine may produce in conditions

of respiratory feebleness, the more reasonable explanation of the symptoms is by the last-named hypothesis. It is known that Cheyne-Stokes respiration can be brought about by giving morphine to etherized dogs, and this form of breathing is usually to be regarded as indicating a lessened irritability of the respiratory centers. It is therefore probable that a similar condition might be produced in human beings, and under certain circumstances might be so pronounced as to partially or completely paralyze the respiratory functions. Artificial respiration would probably be successful in such cases if persevered with for a sufficient length of time.—*F Hewitt, M. D. in Annals of Surgery*

THE TREATMENT OF PALPITATION.

The treatment of palpitation is moral, hygienic, and medical, and the value of these stands in the order in which I have placed them.

1. *Moral Treatment.*—In the moral treatment the grand point is to impress the sufferer with the confidence that there is no instant danger from the seizure; for palpitation is fed by fear, and so little as an expression of fear by the looker-on increases the intensity of the over-action. In like manner all hurry and worry aggravate the symptom, and so, during the attack, the utmost care should be taken to avoid noise, haste, and fussiness. A gentle persuasion toward quietness, a firm assurance that the seizure will very soon pass away, and the best help of an encouraging kind is supplied.

2. *Hygienic Treatment.*—The hygienic measures for the treatment of palpitation have reference to the directions which should be given for warding off the attacks and for removing the unhealthy conditions of body which dispose toward them. In these directions it is essential to include, first and foremost, the removal of all possible causes of excitement, worry, and exhaustion, mental or physical. To this must be enjoined regular habits of life. Early hours for bed are requisite, and a continuance in bed in the recumbent position for eight hours out of the twenty-four at least is very important. During the day moderate out-door exercise, with avoidance of rapidity and of over-action from climbing steep ascents, should be specially enforced.

To the moderate open-air exercise above suggested, should be added daily and free ablution in water just sufficiently warm not to create a shock or to leave a sense of chilliness of the skin. Brisk friction and the use of a flesh brush may follow the bath with advantage. I would, however, while on the subject of baths, offer a word of warning as to the Turkish or Roman bath in this class of cases Good as that bath is in cases of disease properly selected for it, it is not good for persons subject to acute and extreme palpitation. The stimulus of the heat has caused, in two patients I have known, a severe and troublesome seizure.

Meals should be taken at regular times; at no time should a heavy meal be indulged in, and the simpler the diet the better. Some articles of diet in ordinary use should be limited. Too much animal food is bad. Light and easily-digested foods, in moderate quantities, and fresh fruits are always good. In one of my cases a trial of a purely vegetarian system of diet had unquestionably a very good result, but as different scales of diet are suitable for different persons I cannot here lay down any hard-and-fast rule. The plan I am accustomed to follow in prescribing diet is to find out from the patient's own report what articles of diet suit best, and then to use my own judgment at the time for advising the selection.

As regards drinks, there are three which, in my experience, are always unfavorable in cases of palpitation. These are tea, coffee, and alcohol in every shape. I know of no case of the kind in which tea has not proved injurious. Coffee is not so bad as tea, altogether, but there are very few instances in which coffee can be readily tolerated. Alcohol is often much craved after, but it is a most deceitful ally. A little excess of it is prone of itself to excite the over-action without any other spur, and soon after it has been removed from the body it causes a depression which favors the recurrence of palpitation, under any excitement, in the most marked degree. The quantity of fluid taken should be limited in amount; and as to quality, the nearer it comes to water pure and simple the better.

Something requires to be said about mental as well as physical food. Readings, amusements, and pastimes which keenly affect the emotional faculties are to be avoided as much as any more plainly physical forms of excitement. Whatever mental food keeps the mind awake, whatever makes the sufferer hold his breath with wonder or anxiety, is bad as bad can be. Exciting novels, plays, exercises, games of chance, should most surely be put aside. But good, pleasant, steady mental work is not harmless merely; it is useful; it prevents the mind from brooding over the bodily incapacity, and it becomes an element of cure.

Under this head of hygienic practice there is one habit, bearing chiefly on the male sex, to which I must allude, and against which it is absolutely necessary to protest. I refer to the habit of smoking tobacco, and to the use of tobacco as a luxury in every way. Tobacco is the worst of enemies to soundness of heart and steadiness of heart work. To those who are subject to acute palpitation, tobacco is so mischievous that it is hopeless to attempt to treat them until the habit

is abandoned. On this point there must be no mistake.

3. *Medical Treatment.*—During an attack of acute cardiac palpitation, medical treatment of a direct kind can only be palliative. It is a common practice to place the patient in the perfectly recumbent position, but as this positian leads, frequently, to breathlessness and much discomfort, I never enforce it unduly. The sufferers usually find out the best position for themselves, and standing up, and even gentle walking backward and forward, commonly appear to bring relief, as if the general muscular action equalized the local over-action.

For the actual palpitation, digitalis is the only remedy I have found of any positive service, and it combines well with remedies which have a tendency to promote quickly the cutaneous and renal excretions. I usually prescribe the tincture of digitalis in five or ten minim doses, with half a fluid drachm of nitric ether, and two fluid drachms of the liquor ammoniæ acetatis. In instances where there has been prolonged sleeplessness, with palpitation, I have combined morphia, in full doses, with digitalis, with good effect, adding the narcotic dose to the formula just named.

In general treatment I am accustomed to follow, whether the heart be organically sound or unsound, the same methods as those described in my previous essay on intermittency. The organic bromides of iron, quinine, and morphia, and the mixture of iron carbonate ammonia, and morphia, are excellent remedies. The only difference in treatment, in fact, relates to the use of alcohol, which, valuable in some cases of intermittency, is less compatible in cases of palpitation.

4. *Treatment of Epigastric Palpitation.*—The rules already offered for the management of cardiac, apply equally to the epigastric palpitation. There is, however, in cases of epigastric palpitation more frequent necessity to meet dyspeptic symptoms, including flatulency and constipation, by alterative and mild aperient correctives.—Benjamin Ward Richardson, M.D., F.R.S., in *Asclepiad.*

THE ABUSES OF MILK DIET IN THERAPEUTICS.

The therapeutical employment of milk, not only has been popularized and the lay public made familiar with its various adaptations, but in the wake of the general appreciation has followed the usual exaggerations, and hence it is prescribed with little regard to the conditions properly requiring it. Under these circumstances it seems desirable to indicate the limitations of this therapeutical food, and to show wherein it may be hurtful rather than beneficial.

In certain disorders of the digestive functions, milk causes a sense of discomfort, decided uneasiness, oppression—sometimes even pain, and it prolongs the morbid condition. The cases of this kind may be grouped into two classes: those in which the casein is the offending material; those who cannot properly digest the cream or butter. We find examples of the first class more frequently amongst children, but they are by no means uncommon in adults. They are detected the more readily in early life, because the curds are rejected by vomiting, or appear undigested in the stools. Adults unable to digest casein, or who digest it slowly or painfully, have epigastric distress, heaviness and oppression for several hours after meals, stupor and disinclination for exertion coming on after an hour or two and continuing until the offending material has passed well down the intestines.

An excellent substitute for the milk when the casein disagrees is barley-water with cream. The barley-water should be carefully strained and have the density of good skimmed milk, and one-sixth or one-fourth cream added, so that the mixture has the consistency of rich milk.

Another class of subjects to whom milk is unadapted are the cases of duodenal, hepatic and pancreatic diseases, because of the deficiency in the secretions necessary to the process of emulsionizing fats, and preparing them for entrance into the lymph vessels. Fats decomposing form very irritating fat acids, and the change in the reaction of the intestinal juices is the cause of various secondary troubles in the biliary functions and elsewhere. To fit milk for use, under such circumstances, it must be skimmed, and about the time the stomach digestion is completed, aids to the intestinal digestion should be administered. Such aids are a soda alkali, and it may be, some pancreative solution to effect complete digestion of the fatty constituents.

The mere bulk of the milk is an objection to its use in certain diseases. In dilatation of the stomach, the space occupied by the necessary quantity perpetuates the disease. The reflex effects of distension of the stomach in cases of weak heart, and in angina pectoris, may not only cause distressing symptoms, but may even prove fatal. It cannot be too strongly stated that milk is a highly objectionable aliment in heart diseases, whenever the motor apparatus of the organ is diseased, and whenever its movements are readily influenced by morbid states of the stomach through the reflex channels.

In no malady, as I conceive, is milk more abused than in acute rheumatism. It is very often the chief—sometimes the only aliment employed during the whole course of this disease. Besides the objection inherent in its mere bulk, certain theoretical considerations of its nature should have considerable weight in deciding the question of

use. The very obvious objection that milk furnishes lactic acid as a product of its fermentation, should not be ignored All the world knows the intimate relations between lactic acid and the rheumatic poison. By the introduction of lactic acid, a form of endocarditis not distinguishable from the rheumatic, is set up, and of those diabetics treated by lactic acid, a considerable proportion suffered from attacks of rheumatic fever (acute rheumatism). It is difficult, of course, to determine this point with certainty, but I have reason to believe that patients with rheumatic fever do not get well so quickly, and are much more apt to have relapses when they consume much milk during the course of the diseaae. Surely, sufficient reasons exist for undertaking a thorough investigation of the question. My own practice, in the cases in which I am consulted, is to advise against the use of milk as an aliment in acute rheumatism.

In typhoid fever, milk is the one food now given, irrespective of the character of the cases. Of late this almost universal practice has come to be challenged. It has been depended on, without investigating the state of the digestive functions, and quite unmindful of the effect it may have on heat production. It is often given in too great quantity at a time, or so frequently that the stomach has not disposed of one quota before another is thrust upon it. Unless the gastric juice has preserved, to a considerable extent, its power of converting the albuminoids into peptones—which we have no right to expect—the casein resists its action; hence it follows that the materials of digestion should be administered soon after the milk is taken, and to prescribe it without reference to the ability of the stomach to dispose of it is to insure increased fever and delirium, and more frequent stools. Besides supplying the means for proper digestion of the milk, attention should be given to its administration at such intervals that every portion given may be disposed of before another is permitted to enter the stomach. It is a trite observation, which is not therefore less true, that it is more important to the nutrition if some food be well digested rather than a large amount be merely swallowed.

Notwithstanding, since Donkin's first reports, milk has entered largely into the dietary of diabetics, its utility has recently come to be seriously questioned. If conversion of milk sugar into grape sugar does not take place, there can be no doubt of the value of milk in this disease, since it possesses so great a number of alimentary constituents. If, as is now asserted, this conversion does take place, the free administration of milk in diabetes, must be regarded as an abuse.—Bartholow, *in Journal of Reconstructives.*

The author of the "Ode to Bacillus," published in Nov. Lancet, is Dr. Todd Helmuth, of N. Y.

THE REMEDIES I USE IN PRACTICE.

Dr. P. H. Carson (*Kansas City Medical Index*):

For Bronchitis.—There is no combination from which I derive so much satisfaction in the treatment of ordinary "colds" as ℞. Ammonii chloridi, ʒ j; tinct. opii camphoratæ, f ʒ ss; syrupi scillæ comp., f ʒ jss. M. Sig. Teaspoonful every two or three hours, as the cough may require. If there be some fever, I add a suitable quantity of tincture of aconite.

For Pharyngitis.—As a "gargle," I derive most benefit, in acute inflammation of the pharynx, from: ℞. Potassii chloratis, ʒ j; aquæ destillat., f ʒ iij; ft. solut. et adde; tinct. ferri chloridi, f ʒ ij. M. Sig. Use as a gargle four or five times daily. Sometimes, if the inflammation be severe and accompanied by constitutional disturbances, I prescribe internally tincture of phytolacca decandra, with the happiest results.

For Lumbago.—For the relief of lumbago, I order a belladonna plaster over the neuralgic parts, and internally a mixture of: ℞. Extracti cimicifugæ, f ʒ iij; codeinæ sulphatis, gr. x; syrupi acaciæ, f ʒ ss.; aquæ, q. s. ad. f ʒ iij. M. Sig. One teaspoonful every three hours until relieved. When the pain is not severe it is best to leave the sulphate of codeine cut of the prescription.

For Burns.—There is nothing so beneficial for recent burns as carron oil: ℞. Olei lini sem., aquæ calcis, āā f ʒ ij. M. Sig. Apply to burned surface. Afterwards, if there be much suppuration, subiodide of bismuth may be dusted over the parts, making just a very thin film; if this produces much irritation, the sub-nitrate in conjunction with some mercurial in vaseline may be used. Iodoform is worse than useless.

For Conjunctivitis.—In cases of conjunctivitis, I have long since discarded any irritating applications. Nitrate of silver, sulphate of zinc, acetate of lead, only add fuel to the fire. I write ℞. Hydrargyri oxidi flavi, gr. ss; unguent. petrolei, ʒ ss. M. et ft. unguentum exactum. Sig. Apply two or three times a day until relieved.

For Anemia.—As a tonic in anemia there is nothing equal to some preparations of iron. The most eligible mixture containing iron is one which I have used for a long time without a single complaint of nausea or other gastric disturbance, consisting of: ℞. Ferri citratis (*solubl.*) ʒ jss; aquæ destillat., f ʒ ij; fiat. solut. et adde: acidi sulphurici aromatic, f ʒ iij; glycerinæ, syrupi simplicis, āā f ʒ j. M. Sig. One teaspoonful one hour after each meal. When the iron is given immediately after meals it unites with the tannic acid of the tea or other articles of diet, forming an insoluble tannate of iron—a pure ink, but not very valuable therapeutically.

For Delirium Tremens.—In quieting the delirium of acute alcoholism, I sometimes use chloral hydrate or the bromides, but more often rely upon : R. Extracti lupulinæ fluidi, extracti hyoscyami, āā f ℥ ss. M. Sig. One teaspoonful every two or three hours until delirium subsides. Monobromide of camphor acts well to control the persistent insomnia in certain instances.

For Diarrhea.—In controlling obstinate cases of diarrhea there is nothing more efficacious in my hands than the old prescription : R. Pulv. opii, camphoræ, plumbi acetatis, āa gr. x. M. et dispens in capsul. No. x. Sig. One capsule every two hours until the diarrhea ceases. In some cases large doses of tannic acid may be used or bismuth subnitrate in combination with one or more of these three drugs ; but when other remedies have failed this prescription will be found to check the discharges, particularly if there be blood in the feces.

For Vomiting of Pregnancy.—For this often intractable trouble I generally give : R. Acidi carbolici, gtt. ij ; bismuthi subnitratis, ℥ j ; aquæ menth. pip., f ℥ ij. M. Sig. One teaspoonful as often as necessary to check vomiting. If one dose be ejected, wait a few moments until the nausea subsides and then repeat. Certain cases do well on iced champagne, while others persist until dilatation of the cervix is performed.

For Sleeplessness.—When opium is contra-indicated, and there is persistent insomnia, my choice usually is : R. Ammonii bromidi ℥ iij ; aquæ q. s. ut ft. sol. : tincturæ hyoscyami, q. s. ad f ℥ ij. M. Sig. One teaspoonful every hour or two until sleep is produced.

For Fetid Sweating.—For the fetid secretion of the axilla or of the feet, a solution of salicylic acid is excellent, or this may be used : R. Potassii permanganatis, ℥ j ; aquæ, Oj. M. Sig. Apply to the parts night and morning.—*Amer. Med. Digest.*

MEDICAL NOTES.

Among the numerous agents used to *deodorize iodoform*, freshly pulverized coffee is useful.

" A *persistent fissure* in the middle of the upper lip is a very suspicious sign of a scrofulous diathesis."

Dr. Longstreth recommends a large-handled knife for *post-mortem operations* as less tiresome to use than one with a small handle.

Soft, thin, *waxed paper* is found to answer the purpose of oiled silk or muslin in the majority of dressings, and is very much cheaper.

It is not an uncommon thing to have the temperature of a *typhoid fever* patient rise as much as 2° when a storm is approaching, and then revert again when the storm is settled or over.

The carbolic acid solution, formerly 3%, used for washing surgical instruments in the Jefferson Hospital, has been reduced to 2% ; this answers the purpose and does not affect the hands.

Prof. Da Costa recently prescribed five-grain doses of effervescing bromide of nickel in combination with iodide of potassium three times a day, for a girl, 19 years old, suffering from *epilepsy*.

A practical way to distinguish *atheromatous degeneration* of the arteries from a wiry pulse, is to place the finger lengthwise along the artery, and the difference is very noticeable. (Da Costa).

For a case of *gastro-intestinal catarrh*, Prof. Da Costa ordered broth diet and a prescription containing—

R. Bismuth. subn t., ... gr. x.
Pulv. aromatic., ... gr. iij.
Pulv. opii, ... gr. ¼.
Ft. chart. j. M.

Sig.—Take four times a day.

A neat and convenient way to handle *corrosive sublimate* for making antiseptic solutions is to dissolve 15 grs. in f ℥j of alcohol, which, added to a quart of water, makes 1-1000, and does not undergo chemical change if used immediately.

Prof. Da Costa has noticed what he calls an *emotional temperature* in cases, most especially women in childbed. The temperature may reach as high as 110°, and yet recovery take place. The duration is very short, only lasting a few minutes at a time.

The following prescription has been used with favorable results in general *constipation* among the patients of the out-door department of the Jefferson Hospital :—

R. Ext. cascaræ fluid,
Ext. glycyrrhizæ fluid, āā f ℥j. M.

Sig.—Teaspoonful at bedtime.

Prof. Bartholow used for a long time a five per cent. solution of carbolic acid in a case of *epithelioma*, injected hypodermatically two or three times a week ; not curing but preventing further growth after two surgical operations had failed to remove the trouble.

Cocaine hydrochlorate is rapidly increasing in favor as an anesthetic ; a great deal of minor surgery is done without any suffering of the patient by its use, a 4 per cent. solution being the strength generally employed. Inject in and around the part ; allow five minutes before operating.

Prof. Parvin treated a case of *umbilical hernia* in an infant by reducing the hernia, pinching the skin together and painting with collodion, and ordered the painting to be repeated three times a week ; the truss that the child had been wearing

acted as an irritant and had to be changed every few weeks.

The following prescription is in use in the throat department of Jefferson Hospital for general *inflammations of the throat* :—

R. Potas. chlorat., ... ℥ij.
Tinct. guaiac. ammon., . . . f℥iij.
Mel. despumat, ... ℥j.
Tinct. cinchonæ comp., . . f℥ij.
Aquæ, q. s. ad . . f℥iij. M.

Add two teaspoonfuls to one-half glass of milk; gargle and take one swallow.

For a clinical case of *pneumonic phthisis*, Prof. Da Costa ordered the following prescription :—

R. Digitalis pulv., ... gr. ss.
Cinchonidinæ sulph., . . gr. ij.
Opii pulv., ... gr. ¼.
Ft. pil. j. M.

Sig.—One t. d.

In combination with this, cod-liver oil and small blisters were ordered.

A pill containing the following is being used with very satisfactory results in *phthisis* by Dr. Stewart in the medical department of Jefferson Hospital. The patients in the majority of cases immediately improve very decidedly :—

R. Iodoform, ... gr. iss.
Ferri redact., ... gr. j.
Acid. arsenios., ... gr. $\frac{1}{50}$.
Ft. pil. j. M.

Sig.—One t. d.

A case of *neuritis*, involving the sciatic and crural nerves of one side, accompanied by loss of power and wasting of muscles, was recently presented at the Jefferson clinic, and the following plan of treatment advised :—

R. Syr. calcii lactophosphatis, . f℥j.
Liq. potassii arsenitis, . . . gtt. iij.
Sig.—Ter die. M.

Also of ol. morrhuæ ℥j ter die.

Locally, to lessen congestion, a constant, descending, stabile galvanic current as strong as could be borne was advised to be used to the affected nerves; faradism, if need be, to exercise the muscles; and for the pain, if it became at any time necessary, the hypodermatic injection of cocaine in the neighborhood of the nerve.—*Col. and Clin. Rec.*

Bone-Setters and Surgeons.—In commenting on the recent death of R. H. Sutton, the bone-setter, who was well known in London, and especially in sporting circles, the *British Medical Journal* remarks: It is significant, though by no means surprising, that the daily press has taken the opportunity of singing the praises of bone-setters this week, to the disparagement of orthodox surgery, as far as diseases of joints are concerned. The subject, as we are all aware, has been repeatedly discussed in medical journals and before medical societies. Some of the many sources of the bone-setter's success are self-evident. The public believe in "gifts" and "inborn genius," in men who know without learning. This feature in human nature is reflected in works of fiction, where the hero is made to scribble off some masterpiece of literature, or to dash off a picture which puts the old masters to shame, all without study, his time being taken up, as the narrative usually shows, by more picturesque but less professional employments. The bone-setter is popular partly because he is believed to be a genius who has not crammed his head with Doctor's Latin. Another class of the public have some personal objections to medical men and chant the praises of bone-setters without looking into facts. There remain, however, the important truths that bone-setters have gained the confidence of hundreds of intelligent persons, and that, although it has repeatedly been shown that gross errors of diagnosis and complete failure have often attended the practice of these empirics, it is equally certain that they sometimes cure cases which ought to have been cured by qualified men already consulted. Patients with chronic articular diseases expect manual treatment, not advice. Too often they get only the latter from the surgeon, whilst the bone-setter does the work which the qualified attendant only tells the patient to do for himself, or at the most leaves it to be done by a "rubber." Thus not rarely we hear of a patient applying to some distinguished surgeon for relief from chronic synovitis of a joint, the result of a sprain He is told to rub the affected part, and perhaps some lotion is prescribed. Now it does not follow that he has the least idea how to rub the joint, and at the best, manipulative treatment of one's-self is unsatisfactory. The services of a rubber may be recommended; then, if the joint be cured, the rubber rather than the surgeon gets the credit. When, on the other hand, a patient consults the bone-setter for the same affection, the joint is dexterously wrenched after it has been pronounced to be "out," old adhesions are torn down, and permanent benefit often effected, and all this is done by the bone-setter himself at one sitting. Of course, a success of this kind inspires public confidence in favor of the empiric, who also knows when the extra services of a rubber are needed. He makes a show of doing something for the patient himself from the very first, and uses terms at random which give the impression that something definite has been done. The surgeon is consulted because he is supposed to cure with his hands. He is never above operating, so there is no reason why he should be above manipulating. When

surgeons become as ready to rub and manipulate old sprains in the consulting-room as they are to open thecal abscesses, and to master the details of breaking down old adhesions as they now master the steps of an operation, the bone-setter's occupation will be gone.—*Gaillard's Med. Journal.*

A New Sexual Sedative. *Salix Nigra.*—J. Hutchinson, M. D., writes in the *British Medical Journal*, July 30th, of his experience with the *salix nigra*, or pussy willow, his attention having been called to the virtues of the drug by a report in the "Transactions of the Texas State Medical Association," from Dr. Paine, who prescribed it successfully in cases of ovarian hyperesthesia, uterine neuralgia, etc., and also in spermatorrhea and nocturnal pollution. His verdict upon the drug is that it is a powerful sexual sedative, similar in its action to bromide, but without its depressing qualities.

Dr. Hutchinson obtained a supply of the fluid extract, and has been employing it for some months. The most numerous class of cases in which he exhibited the drug were women of nervous temperament, in whom the nervous irritability reaches its height at the menstrual period, when, along with the general *malaise*, is added a very decided pain in one or other ovary. They also suffered from hemicrania, the pain being situated above the left eyebrow, and resembling the feeling as if a nail were being driven into the skull (clavus). Many of them, too, complained of pain under the left breast, and extending round to the back. On one or two occasions, he has noticed patients complaining of the above symptoms, and in only a moderate degree, under favorable conditions—as for example, long-continued anxiety or alcoholism—go from bad to worse, till they become hystero-epileptics. In cases of this kind, it is supposed that the centre of inhibition has in some way got out of gear, and the severity of the symptoms depends upon the amount of disturbance in this nerve centre.

In cases where the ovarian distress was the symptom for which advice was sought, as being, in the patient's eyes, the most prominent, he usually succeeded in eliciting other indications of an irritable nervous system, and placed them upon half-drachm doses of the fluid extract of *salix nigra*, three times a day. In quite seventy-five per cent. of the patients so treated, a great amount of relief was obtained after two or three days' treatment. Not only was the ovarian hyperesthesia relieved, but the nervous palpitation of the heart was abated, and the patient felt in every way stronger.

He has also given the drug in two cases of nocturnal emissions, with marked benefit. The pollution ceased entirely while the drug was being taken, and for several months thereafter. Virile power and passion were not much, if at all diminished, but the relief from the ailment gave great satisfaction.—*Boston Med. and Surg. Jour.*

The Production of Alcoholic Cirrhosis of the Liver.—At the meeting of the Society of Biology, held in Paris, July 16th, Straus communicated the results of some experiments which he had made, with the assistance of his interne, Blocq, on the artificial production in animals of alcoholic cirrhosis of the liver. His experiments pertained to twenty-four hares, into the stomach of which he had directly injected a daily dose of half an ounce of a mixture of absolute alcohol and methyl alcohol, diluted with three parts of water. Immediately upon receiving this injection, the greater part of these animals fell as if paralyzed, and for several hours they lay in deep coma. When, after the expiration of a certain time, these animals were killed, the experimenters invariably found the usual lesions of alcoholic gastritis, thickening of the mucous membrane, ecchymotic petechiæ of the surface, etc., but what especially attracted their attention was the pathological condition of the liver. This organ did not present to the naked eye any very marked alterations; it was smooth on surface as well as on section; the acini, nevertheless, were surrounded by a reddish gray line, and in animals that had been kept most of the time intoxicated for three or four months, the ultimate perilobular portal spaces were found infiltrated with embryonic cells. In hares that had been kept constantly subjected to the action of the poison for seven or eight months, the hepatic lobules were completely surrounded by a crown of connective tissue cells, and the experimenters had before them typical cases of annular perilobular and monolobular cirrhosis. —*Boston Med. and Surg. Jour.*

Cocaine in Diabetes Mellitus—Cocaine having a pacifying effect upon the brain and a most excellent remedy for the relief of polydipsia from other causes, I prescribed two drops of a four per cent. sol. every three hours, and an anti-diabetic diet.

After a few days the polydipsia disappeared and the urine was little above the normal quantity. The pruritus vulvæ was much less annoying. The itching and dryness of the skin was absent. The other conditions remained the same. I continued the same prescription, adding another for the anemia and as a tonic, viz.:

℞ Tr, opii . . . . . f ℥ j
Tr. ferri chlorid. . . . . f ℥ j

M.S.—Twenty drops three times a day in water after meals.

The patient was ordered to return in two weeks.

I saw the patient again in three weeks, when all the symptoms had disappeared. The anemia was very much diminished, and she felt "as well

as ever" The nervous symptoms had all improved and the palpitation of the heart had not recurred once. I now continued one drop of a two per cent. solution of cocaine, and the iron. After using this treatment for a month longer, the case could be called cured, as all traces of sugar were absent when I made the last examination of the urine. I have since heard of the patient, and there is no return of the symptoms.—*Med. and Surg. Rep.*

PREPUTIAL DILATATION.—Dr. de Saint-Germain says:—The accidents which sometimes attend circumcision—serious hemorrhage, partial gangrene, and diphtheria of the wound—have led me to discard this operation or to reserve it for those cases (about one in every three hundred) in which dilatation is impracticable.

Dilatation, as advocated by Nélaton and practiced by many surgeons, consists in the insertion of a dilator in the orifice of the prepuce and the gradual enlargement of the opening. I prefer a dilator having two blades instead of the three blades of Nélaton. This operation, which is completed by separating the adhesions with a grooved director and followed by daily massage, in which the gland is alternately covered and exposed, has given the most satisfactory and durable results. Ignipuncture of the tonsils may well take the place of tonsilotomy, an operation not free from the possibility of fatal accidents. The mere mention of uncontrollable hemorrhage and diphtheritic invasion of the wound makes it clear that the operation is not so free from danger as many suppose.

Krishaber has substituted cauterization, but his superficial application of the thermo-cautery prolongs the treatment indefinitely. I operate with a modification of Smith's gag, thrusting the thermo-cautery in the shape of a pointed hook into each tonsil to the dept of three-eights of an inch. The application is repeated from two to four times at intervals of eight days, when the tonsils appear evacuated and shrivelled and present only small and unimportant stumps. I have met with no accidents and have had invariable success

In view of the frequency of these two classes of cases and of the satisfactory results obtained without risk to the patient, ought we not to consider the substitution of preputial dilatation and ignipuncture of the tonsils in the place of circumcision and tonsilotomy, an appreciable surgical advance.—*Am. Med. Digest.*

BOVININE.—This preparation is a raw extract of beef and mutton, free from drugs, minerals, salts or any artificial aid to digestion. This solution gives the blood spectum very strongly and contains so much albumen (34.70 per cent.) as to become almost solid with dilute nitric acid. Of course, it is an exceedingly powerful and easily digestible form of food. Among other applications the use of Bovinine as an enema will strike every one. J. C. White, M D., Toronto, says:—"I am satisfied that Bovinine is an excellent supportive in cases of anemia or debility. I have used it this past season with much satisfaction."

NOVELISTS' MEDICINE.—Lady writers of fiction, as a rule, limit their literary eccentricities to excursions among amorphous elements of novelists' French and un-English grammar. They sometimes dose freely with poison and the dagger, but rarely venture on strictly anatomical details. The most unfortunate *lapsus calami*, however, which has come under our observation is the following: The hero, with great difficulty, has succeeded in saving the heroine from falling over a precipice. The lady has fainted and is apparently lifeless, but the hero finds, to his intense relief, "by the pulse in her *femoral* artery," that her heart still beats.—*Bristol Medico-Chirurgical Journal.*

WHENEVER YOU HAVE an inquiry about electrical appliances for medicinal use, you will never go astray in commending those made by Jerome Kidder & Co., 820 Broadway, New York. Every desirable feature of electrical methods of treatment are embraced in the varieties of instruments they manufacture. They have stood the test of time, of medical surveileance, of public observation, and to-day they lead all others in merit and sale.—*Pharmaceutical Rec.*

COLORLESS TINCTURE OF IODINE.—I find a formula in the fifteenth edition of United States Dispensatory, for making colorless tincture of iodine Equal parts of compound tincture of iodine and aqua ammoniæ mixed constitutes the formula. This must stand for twenty-four hours before it becomes colorless. I find by adding four drops of carbolic acid to the ounce, and shaking, it becomes colorless —Brewer in *Atlanta Med. and Surg. Jour.*

WE have received from Battle & Co., manufacturers of Bromidia, a certified copy of a decree of the Circuit Courts of the United States, restraining D. W. Gross & Son from manufacturing that article. In a recent number of this journal, we deprecated the piracy by which manufacturers of genuine articles are defrauded, by having cheap and worthless imitations put on the market. We do not say that in the present case the article called Bromidia was cheap or worthless for we know nothing of it, but Battle & Co.. have a property right in the word Bromidia, and their rights should not be infringed.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

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TORONTO, DECEMBER, 1887.

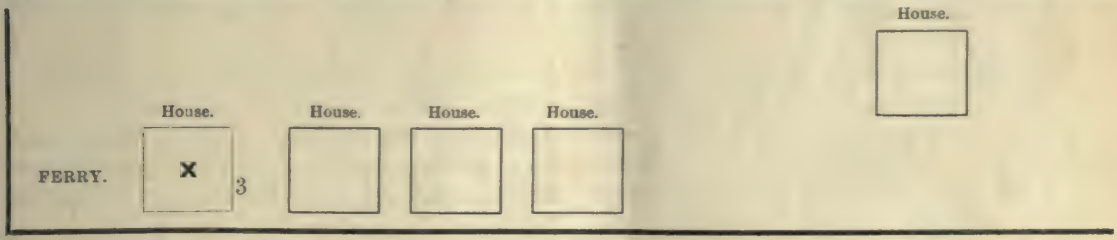
The LANCET *has the largest circulation of any Medical Journal in Canada.*

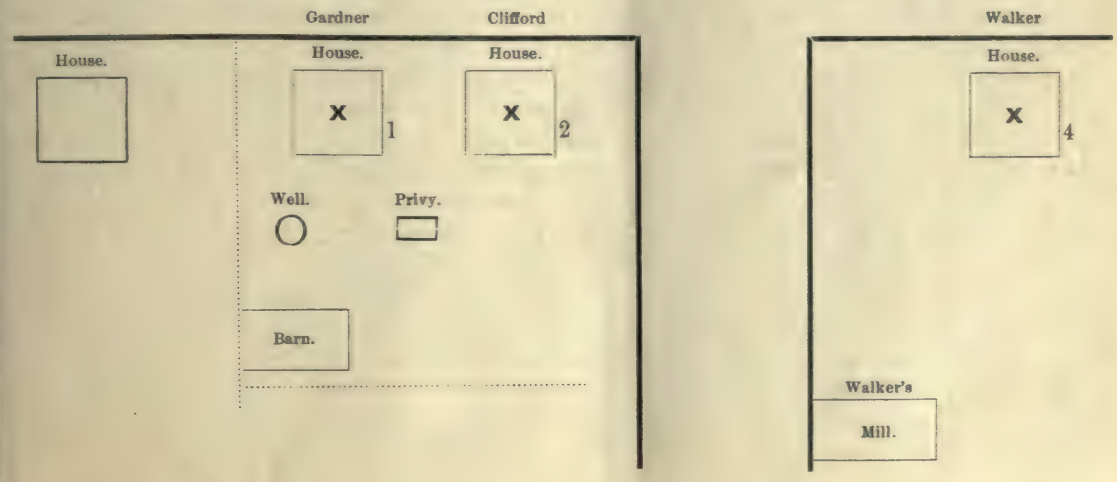
HOW ENTERIC FEVER IS SPREAD, AND HOW IT MAY BE PREVENTED.

Mr. Baker, Secretary to the Michigan State Board of Health, sends us the following instructive account, by Dr. McColl, of Lapeer, of the way typhoid fever was spread in one instance. This report may lead others to trace the spread of this important disease, and, what is of greater importance, act intelligently for the prevention and restriction of the disease, as Dr. McColl did in this instance.

"Houses marked X are the ones in which cases occurred. Nos. 1, 2, 3 and 4, order of outbreak. Cases 2, 3 and 4, traceable to water from well in rear of No. 1.

About September 1st, 1887, M. Gardner, railroad employé, came from the south sick with fever to his father's home, No. 1 on Diagram. His case was supposed to be malarial. No care was exercised with stools in the way of disinfection, but they were thrown into privy vault in rear of house, and in close proximity to well. Wash water was thrown on the surface of the ground, which was very dry at the time. About 7th or 8th September, a copious rain fell and soaked the sandy soil; and on the 14th, Wm. Gardner and wife, father and mother of M., and E. D. Gardner a brother (who was a student in my office), and who boarded at home, were attacked with fever. On this day I got home from Washington, and found four of them down with a severe type of typhoid fever, and in two weeks M——'s wife and child were attacked; also a child, across the





street at Terry's, who had used water from the Gardner well. About the same time, three cases occurred in the Clifford house south of Gardner's, who also used water from the Gardner well. None of the people from either of these houses were in the Gardner house. In the Walker house, still further south, one case has occurred, and I was at a loss to account for this case till a few days ago, when the young man said that at the mill where he was working, they had used the Gardner water for a few days, owing to disarrangement of the pump at the mill. Two others of the mill hands —Anderson and Lester—who used the same water, were attacked about the same time. Lester is now convalescent. Anderson is dead, as also the child of Terry's. When I took charge of the cases I ordered the discontinuance of water from the Gardner well, and the disinfection of the stools; and no new cases are now reported. People who assisted to take care of the Gardner and other families, and who use water from other sources have not been attacked. Clearly, M. Gardner brought the fever home, the well became infected after the first rain from slops and privy, and the other cases got their seed from the water."

The above is of extreme interest and importance to the profession just now when typhoid is so prevalent, especially in country districts and small villages. There is nothing new in it, nor are we exaggerating when we say that not one medical man in a hundred doubts that the disease is always spread by seed from the bodies of patients infected, in the vast majority of cases through the drinking water used. But it will perhaps call anew their attention to the necessity of exercising the most scrupulous care in the disinfection of typhoid, excreta, and so for as is possible, of educating the laity to understand how the disease is propagated, so that they may act intelligently in concord with the medical attendant. It is not always easy or even possible to trace the seed, but if more attempts in that direction were made, and the results when clearly made out, explained to the people, a powerful factor would be introduced for the prevention of epidemics. The attendant may give careful directions, but unless those who have charge of the patient are made to understand the *reason* for all the necessary precautions, some old woman who has the reputation of knowing a good deal about sickness and nursing, may render all the Doctor's instructions valueless, by stating that she never saw such measures taken, etc.

TRINITY MEDICAL SCHOOL ANNUAL DINNER.

The eleventh annual banquet of Trinity Medical School was held at the Rossin House on the night of the 10th inst., and was one of the most successful that have ever been held under the auspices of that institution. The chair was taken by Mr. D. M. Campbell, of St. Thomas, and the vice-chairmen were Messrs. Johnston, Uren, and Sutherland. Among the invited guests who were able to be present were Bishop Sullivan, Revs. G. M. Milligan, D. J. Macdonnell, Dr. Thomas, Hon. G. W. Allan, Col. F. C. Denison, M. P., W. S. Lee, P. Hughes, Drs. Carlyle, Daniel Clark, Canniff, O'Reilly, McFarlane, Buchan, Graham, Ryerson, Stark, as also the whole faculty and staff of lecturers of Trinity.

The scene, when the whole party of students and guests sat down to partake of the good things prepared by mine host, Mr. Irish, was very impressive, and one which will be long remembered by the students present. The dinner was excellent and the utmost good feeling and harmony prevailed while the inner man was being satisfied. Letters were read from Sir Alexander Campbell, Sir John Macdonald, Premier Mowat and others expressing regret at their inability to attend the banquet. The speech of the chairman was exceptionally good and was listened to by all present with marked attention and interest. The fame of Trinity, her graduates, undergraduates and faculty did not lose anything by the manner in which she was represented by the eloquent speaker, who expressed the hope and indeed the conviction that she would long stand in the vanguard in the furtherance of medical science. The Glee Club was in excellent form and interspersed the proceedings with some new college songs, which while they may not have awakened the same fond memories in the minds of the veterans who occupied seats at the board as "Litoria" or "Old Grimes" might have done, were a delightful change. It was remarked that the speeches from the vice-chairmen and representatives of the various years were unusually good, perhaps because these gentlemen said what they had to say and stopped.

The loyal toasts were enthusiastically honored in cold water. The Dominion Parliament and Local Legislature were responded to by Senator Allan and Col. Fred. Denison. Dr. Caniff replied for the Mayor and Corporation. Dean Geikie replied for the faculty, and the toast of "Sister Universities" was responded to by Senator Allan, Rev. G. M. Milligan, Dr. McFarlane, Mr. Turnbull, Dr. Kennedy (McGill, Montreal), Mr. Horsey (Royal Military College, Kingston), Mr. McDonald (London), Mr. Houston (Trinity) and Mr. Lea (Toronto). "The Sister Professions" was responded to by Bishop Sullivan.

The Dean, in response to the toast, "Trinity, her graduates and undergraduates," gave as is his wont an interesting and instructive resumé of the position Trinity occupies among the medical schools of Canada to-day, and pointed out that she had attained to that position by thoroughness in her course of instruction, and a genuine desire to do the very best that circumstances permitted to further the interests of medical science and of her alumni. He was confident she would "go on conquering and to conquer."

The representatives from McGill, Queen's and the Western were all well received, and showed in what respects their several institutions lead the van in medical education.

Dr O'Reilly responded for the Hospital, Dr. Graham for the press, and Dr. Bingham for The Ladies. The meeting broke up at an early hour, after an extremely pleasant evening, and by far the largest medical banquet ever yet held in this city.

LENGTH OF MEDICAL COURSES.

The two years' system seems to be the prevailing one in the United States. This needs no comment, but we quote as authority, and as placing the matter tersely and forcibly, the following extract from a letter by Dr. A. B. Palmer to the N. Y. *Med. Jour.*:—"The mass of students in the medical schools of New York and of nearly all the cities in this country attend only two sessions of not more than six months each; and during each six months the whole field of medical science, including anatomy, histology, physiology, pathology, chemistry, and materia medica, as well as what are called the *practical* branches of practice of medicine, surgery, obstetrics, diseases of women and diseases of children, and the various specialties, is attempted to be traversed. Now, it is not within the bounds of the human capacities or of the natural possibilities that this should be accomplished, and much less that, after this, there should be time, strength, and interest for bedside instruction, however clearly and skilfully such instruction may be presented With all these subjects on their hands and an examination upon them all, however lax, before them, students will not and can not in any proper sense give attention to bedside observation and instruction. This is too apparent to require any more than the simplest statement."

We are better off in Canada, comparatively few of our graduates taking even a three years' course, the great majority putting in four sessions of six months each. There have been, of course, even here in Ontario, occasionally instances in which men have got their degrees in less than even three years, but such cases are few and far between. But we believe that our Councils should be more strict than they are, and that nothing less than the four years' course should be accepted. The writer above referred to goes on to show the importance of *clinical* work, and at the same time the impossibility of getting even a fair share of such work with anything less than a four years' course. We have been somewhat handicapped in this direction in Canada, owing to a want of material, but that state of affairs is rapidly passing away, especially in the two larger cities. In Toronto, by a scheme arrived at by the faculties of the two medical schools, who work together in this branch, a pretty thorough clinical course is given, and it will be a student's own fault if he does not get a very fair practical knowledge of his profession. The arrangements for such study are really good, and no pains is spared by the management of the hospital to aid students in every way possible, and at the same time to protect the interests of the patients. A very large hospital is not necessarily a good one for purposes of study. It will of course present a larger number of rare and strange cases, but with these the general student need not, in his own interest, have much to do. If he obtains during his college days a good practical knowledge of every day work, it is all his time will allow and this may be obtained at any fair-sized hospital

where clinical instruction is properly given. The new scheme in Toronto Hospital seems to be giving satisfaction to the students generally.

BACTERIA IN RHEUMATISM.

The question as to the aetiology of rheumatism is of great importance, and much interest has been taken in experiments and investigations towards its settlement. Lately, Dr. Alfred Mantle in the *Br. Med. Jour.*, argues that, since certain bodily conditions are favorable to the development of these three diseases, rheumatism, scarlatina, and erythema nodosum, we should expect to find the real cause of rheumatism to be bacterial, or essentially the same as, say, scarlet fever. Dr. Mantle set about his investigations apparently convinced of the truth of the above views. He took, with the greatest precaution as to antisepsis, a drachm of serum from the knee-joint of a patient suffering with acute rheumatism, and with this serum at once inoculated a number of sterilized tubes of gelatinized meat infusion, and in every tube the result was a copious growth. He discovered two kinds of bacteria, a micrococcus and a small bacillus. Under the microscope the blood and serum showed micrococci as single cocci or pairs, and in acute cases zooglœa masses; in addition, small, short, thick bacilli were also seen, either single, in pairs, or in colonies. These bacteria were readily stained with methyl-violet, or with fuchsine.

In one case of gonorrheal rheumatism, bacteria were found in the blood only, while in two cases of purpura rheumatica none were discovered. They were, however, found in both chronic rheumatism and rheumatoid arthritis. The question is then put, whether the chemical products of these bacteria may not be lactic acid, which would thus form the chief ptomaine of the disease. The writer says he found that he was able to produce lactic acid fermentation in sterilized milk, by making cultivations of the bacilli of rheumatism, amygdalitis, erythema nodosum and scarlatina.

WE are pleased to notice that Dr. Hetherington, of St. John, N. B., has been lately elected a fellow of the British Gynecological Society.

THE TEMPERANCE LEAGUE.

One of the prominent features of University and College life at the present day, is the tendency on the part of students not to be satisfied with the attainment of scientific and technical proficiency, but to go beyond this and strive to benefit their fellow-students both morally and spiritually. With this object in view, there was established in November, 1886, a Temperance League of the Medical students of Toronto, the object of which, as stated in the constitution, is "the promotion of the temperance cause among the students." No small success crowned the efforts of the committees, for, when the League was only four months old, there were already enrolled 165 total abstainers. It is hoped that this number will be considerably increased during the current academic year, and the newly-elected committee are already at work endeavoring to raise the League to that high standard of growth and development which it must soon attain.

The following officers were elected at the meeting in October, 1887:—Hon. Pres., Dr. Powell; Pres., W. H. Smith; 1st Vice-Pres., M. C. Dewar; 2nd Vice-Pres., J. J. Broad; Sec.-Treas., L. F. Barker; also four representatives from Trinity School, and four from the University of Toronto Medical Department. Two public meetings will be held, one before and one after Christmas. By attending these, the members of the profession will show their sympathy with a movement calculated to raise the status of the medical student in the community, and do good not only to the individual, but to the profession at large, and through it the whole population, wherever medical men shall be found willing to advocate the principles of temperance in the fullest and truest sense of the term.

PREVENTION AND TREATMENT OF PUERPERAL FEVER.—As expressing the most recent views held on this subject, Dr. T. More Madden, of Dublin, in a paper read before the late International Association at Washington, gave the following instructions (*Maryland Med. Jour.*) as to precautionary measures.

1. The most scrupulous attention to puerperal hygiene. 2. The preparatory treatment of the patient—suitable nourishment, fresh air, and a

propriate tonics—of primary importance. The author ordered a mixture of potassium chlorate, iron and quinine, to be taken during the last couple of months of gestation, and he has never seen puerperal septicemia in a patient who had been thus treated before her confinement. 3. From the first day after delivery until convalescence has taken place, the uterine cavity as well as the vagina should be daily thoroughly washed out with water, as hot as may be well tolerated. Carbolic acid and rectified spirit of turpentine may be added, while corrosive sublimate is unreliable and dangerous. 4. He does not use a siphon syringe, but employs More Madden's irrigator. 5. As a general rule, liquor creasoti (B. P.) should be administered two or three times daily in full doses. This may be advantageously combined with the tincture of the chloride of iron. 6. The prevailing type of puerperal fever is of a distinctly remittent typhoid character, and should be primarily treated by appropriate general stimulants and nutriments, as well as by attention to the removal of all septic matters from the uterus, in the way already pointed out. Turpentine, iron, quinine, ergot, and opium, are the only medicines that deserve consideration. Turpentine, the most important, may be exhibited per os, or per rectum, or by the skin. Turpentine is stimulating, depurating, increasing the elimination by the skin and kidneys, and arrests the development of micro-organisms.

THE PRACTICAL USE OF BACTERIOLOGY was illustrated lately, says the *Med. Rec.*, in the following way:

"An Italian steamer arrived loaded with immigrants. There had been no cholera on board, but, as the vessel reached this port, a suspicious case of diarrhea occurred in a child. The symptoms were not perfectly typical of cholera. Some of the dejections were taken, and sterilized tubes were inoculated and taken to the Carnegie Laboratory in this city. It would take four days to develop the cultures, and the question arose whether the steamer should be delayed for that period of time. It was finally decided to do so. The cultures developed in the way charcteristic of Asiatic cholera, and the diagnosis was made. Subsequently other cases of cholera appeared and the culture-diagnosis was abundantly confirmed. But no more striking example of the utility of scientific studies could be furnished than the one referred to."

ROGERS' GROUP OF STATUARY.—The present group of John Rogers, is one well suited to our Christmas and New Year festal season. The title is "A Frolic," or the "Old Homestead." The representation is the time-hallowed sport of "blind man's buff," and the scene chosen is that of covering the eyes of the lady of the house. To those who have, in past years, patronized the artistic productions of Rogers, no commendation will be necessary, and we think those who now, for the first time, become purchasers, will be strongly inclined to repeat their orders. Catalogues may be obtained by addressing John Rogers, 860 Broadway, New York.

SANTONIN IN AMENORRHEA.—Dr. Walter Whitehead, Surgeon to the Manchester Royal Infirmary, speaks highly *(Manchester Lancet)* of the action of santonin in bringing about the re-appearance of the catamenia. He discovered it accidentally, having prescribed it for worms, and having learned that its use was in one case followed by the flow, he, by what he calls "association of ideas," prescribed it again and again with the happiest results. He has had very beneficial results in chloro-anemia, "subordinate to anemia." He orders it in ten grain doses for two consecutive nights, to be followed by a saline (Seidlitz powder) in the morning.

"MEDICAL SCIENCE."—This new medical journal, which put in its first appearance in November, is under the joint editorship of Drs. Bryce, Nattress, Strathy and Nesbitt. From a perusal of the introductory article, we should conclude that there is not only a good deal of poetry in the composition of the editors, but also a large amount of erudition. The journal is well printed and presents a neat appearance. We wish our brother editors all success in their new undertaking.

FOR RENAL HEMORRHAGE, Bartholow says the following is extremely useful:

℞ Ext. Ergotæ fl.,
Tinct. Krameriæ, . . . āā ʒii.
Sig.—ʒi every hour or two.

NEW CAUSTIC PASTE.—The following *(Med. Rec.)* promises well: Powdered starch 37 parts, wheat flour 112 parts, bichloride of mercury 1 part, dried chloride of zinc 110 parts, croton chloral 10 parts, pure iodol 10 parts, bromide of camphor 10 parts, crystallized carbolic acid 10 parts, all to be mixed up in a glass mortar, the ingredients being well pulverized separately, and gradually add to the whole the quantity of distilled water necessary to obtain a homogeneous paste, which keeps in a perfect state of preservation for an indefinite time. When required to be used the quantity necessary should be pressed in the hand previously moistened, and the paste could then be pressed into any shape or form. The following advantages are claimed for this preparation: 1. Moderate pain without any general reaction. 2. Production of an eschar which is hard and well limited, detaching itself quickly or allowing itself to be easily removed with a sharp instrument or by scraping. 4. Marked alterative and antiseptic action. 4. Powerful hemostatic. 5. Easy to be manipulated. 6. This caustic not being fusible, nor deliquescent, may be easily applied to any part, where it may remain from 6 to 24 hours, according to the intensity of action the surgeon may wish to obtain. 7. The eschars fall off in a few days.

THE NEW ANESTHETIC.—In our last number we gave a note of *Gleditschine*, the new alkaloid of the tear-blanket tree, which was said to be a rival to cocaine. It appears, however, that there was some fraud connected with it, the alleged alkaloid containing cocaine and atropine with which it had been adulterated. A good deal of controversy has taken place on the subject, and Dr. Claiborne, on whose authority we believe the original report was made, has not stated definitely what his opinions on the matter are. The matter will soon be settled by examination by manufacturing chemists and others, of leaves which cannot have been tampered with. The ones used in the former trial are said to have been soaked in solutions of cocaine and atropine.

TREATMENT OF COCCYODYNIA BY INJECTION OF PURE CARBOLIC ACID.—Dr. Illingworth, writing to the *Prov. Med. Jour.*, says he has cured cases of coccyodynia in women by the above method. He had tried Sir J. Y. Simpson's tenotomy operation for isolation of the bones, producing only temporary relief to the patient. He injects six minims of the pure acid into the most tender part, having first smeared the adjacent parts with olive oil. This gave instant relief for ten days, when the operation was repeated. The pain did not return for fourteen days, when a third injection completed the cure. The only drawback was a small fistulous opening which remained; this was easily healed.

OIL OF TURPENTINE AS AN ANTISEPTIC.—Recent researches by Hohlmfield *Fortschritte der Medicin* go to show that oil of turpentine is of small value as an antiseptic. It requires to be employed for a long time and in large quantities, to exert its germicide power. This is contrary to the generally accepted idea, and it is well to be borne in mind. Many good authorities, among them the late Angus Macdonald, of Edinburgh, have upheld this drug as an antiseptic agent, but it would appear that it is of value only when nothing better is to be obtained.

BRITISH DIPLOMAS.—The following Canadians have recently been admitted to the L.R.C.P. & S. Ed., and L.F.P. & S., Glasgow: J. D. Thorburn (Toronto), D. Mitchell, E. Clouse and A. Thompson (Trinity). It is remarkable that at this examination, out of forty-eight successful candidates only four or five are Scotchmen; the remainder hailing from all parts of the globe where English is spoken. It may also be noted that our Canadian graduates have either given London a wide berth, or have been in what plucked candidates call "hard luck."

THE CROWN PRINCE.—The growth in the Crown Prince's throat is cancerous, and is situated just below the left vocal chord. There is said to be a slight growth beginning on the right side which will preclude the operation of partial extirpation of the larynx. It is said the Prince will not consent to total extirpation, so the only remaining operative measure is tracheotomy, which may give him a margin of a year or two of life.

NITRO-GLYCERINE IN SUSPENDED ANIMATION.—An interesting case is reported in the *Sei-i kwai* medical journal of Japan, of the resuscitation of

a woman apparently dead by the hypodermic injection of nitro-glycerine, in a case of collapse after child-birth. The doctor in attendance injected ten drops of a solution of nitro-glycerine (strength not given) into a vein. She made a good recovery. It has been suggested that this drug be used in cases of overdoses of chloroform and shock from surgical operation.

Precautions in Chancroid.—Besnier *(Rév. de Thérap.)* enjoins the following precautions in the above disease:—The contact of urine with the chancroid should be avoided, as suppuration is then favored. After micturition the chancroid should be washed with a solution of boric acid and covered with a protective ointment. The pubes should be frequently bathed with soap and water, and a pomade of boric acid, one-tenth per cent., thoroughly applied. If a bubo occurs, the parts should be shaved, and collodion applied.

Process of Petrifying Animal Bodies.—The means of petrifying animal bodies was discovered (*Lancet*) by Dr. Massedaglia in the early part of this century. When he died he left a description of the method in a sealed packet to his lawful heirs. No heirs came forward till quite recently so that the secret may now be expected to be revealed. It it is said there are some bodies of animals, petrified by the original discoverer, in the Museum of the University of Padua.

Coroners.—Robert James Lockhart, M.D., of Hespeler to be an Associate Coroner for Wellington.

There are in London three hackney coach drivers, and one stage driver, all over eighty years of age. Only those who have seen the crowded thoroughfares of the modern Babylon can appreciate fully what the above statement means.

Mr. Savory, F.R.S., President of the Royal College of Surgeons of England, and Senior Surgeon to St. Bartholomew's Hospital, has been appointed Surgeon Extraordinary to Her Majesty, in the place of Richard Quain, deceased.

She Knew.—Helen: "Mamma, what is a *casus belli*?" Mother: "My child, never speak of anything so indelicate! It is the Latin for stomach-ache."

Books and Pamphlets.

Cyclopædia of Obstetrics and Gynecology. Wm. Wood & Co.

In consequence of the painful event which rendered necessary new arrangements for continuance of the publication of the Lancet, an accumulation of four of the volumes of the above series has resulted. We now have before us the 6th and 7th, and the 9th and 10th vols. The two former, by Drs. Hegar and Kaltenback, have been edited by Dr. Grandin. The subjects treated of are the morbid affections of the ovaries, and their therapeutic and surgical treatment, in vol. 6th; and operations on the uterus, vulva, perineum, vagina, etc., in vol. 7th. The wood engravings number no less than 248, presenting an instructive representation of both the normal and the morbid anatomy of the parts treated of, and an arsenal of gyneco-surgical munitions and devices which cannot fail to impress the neophyte in this branch of medical art, with the conviction of its vast amplitude, even now, when it is yet but in its infancy; and it may go without saying, that the fiscal returns from so large an investment must be very respectable.

Volume 9th, by Dr. Gusserow of Berlin, is devoted to the diseases of the mammary glands and the new growths of the uterus, and volume 10th to "diseases of the female urethra, bladder and vagina," by Dr. Winekel, of Munich. The same editor, and of course translator, has laboured in all the four volumes, and he has done his work in a very creditable manner. It is now beyond question that the young practitioner of the healing art should give serious attention to those maladies which are peculiar to the weaker sex; indeed, the senior members also might benefit by the study, for it is well known that the field is one of rich soil, and gives abundant returns.

The age has passed away, though it is not long since, in which the entire code of obstetrics and the corporeal troubles of our grandmothers could be squeezed into a single volume, or even the tail end of one. If the ailments of the sex were then as multitudinous as they now appear to be, perhaps the bliss of ignorance was alike comfortable to the physician and to his trustful patients. The completion of the Wm. Wood series of 12 volumes must convince the young, although hardly all the

aged, that there was dense darkness in the past. Let us hope that the light now bursting on us is devoid of illusory safraction, and that it will reach our centres of vision free from chromatic aberration. Medical science is now bounding forward in seven,leagued boots. To halt in the march, is to fall helplessly and hopelessly into the rear, and to lose all chance of sharing in the booty. So, young men close up your ranks, keep your dress'ng, and let *forward* be the word. *Sic itur ad astra.*

Differential Diagnosis; a Manual of the Comparative Semeiology of the More Important Diseases. By F. de Haviland Hall, M.D., Assistant Physician to the Westminster Hospital, London. Pp. 255. 1887. Philadelphia: D. G. Brinton. Toronto: Carveth & Co.

This is the third American edition of the work founded upon Dr. Hall's *Synopsis of the Diseases of the Larnyx, Lungs and Heart.* The plan adopted by Dr. Hall has been extended to embrace all the more frequent and important diseases. The present edition has been revised and extended by Dr. Frank Woodbury, and is now a complete work within the limits which it aims to cover. The trend of scientific and even of literary education seems to-day to be in the direction of tabulated knowledge, and more or less towards the getting up of facts for the purpose of passing examinations. This is certainly to be deprecated, and used in such a way this book would be not only useless, but harmful. Nevertheless, it will be of great use not only to the practitioner, but to the student in comparing the semeiology of diseases, and will save many a weary hour in making comparative tables for such purpose. It is complete and well arranged, and we can recommend it to the busy practitioner and over-worked student.

A Practical Treatise on the Diseases of the Hair and Scalp. By George Thomas Jackson, M.D., Instructor in Dermatology, in the N. Y. Polyclinic, etc., etc. Pp. 326. $2.75. New York: E. B. Treat. 1887.

The first 60 pages of this useful work treat of the anatomy, physiology and hygiene of the scalp and hair. Part two, treats of the essential, and part three, of parasitic diseases of the hair. In the concluding section are discussed those diseases which are secondary to diseases of the skin. The work is well written, not cumbersome, and not too scientific for the general practitioner, to whom it will be valuable as setting forth concisely the latest ideas on the subject, as well as giving simple and practical methods of treatment.

The Medical News Visiting List for 1888. Philadelphia: Lea Bros. $1.25.

We have just received from the publishers a copy of the above. It is greatly improved and is deserving of the highest commendation. It is a companion which will be found of more than ordinary use, containing, as it does, an almanac, ordinary and metric system of weights and measures, poisons and antidotes, some remedies not yet in general use, etc. We have only to say that to fully appreciate the value of this book it must be seen.

Physician's Visiting List for 1888. Philadelphia: P. Blakiston, Son & Co.

This is quite up to the usual merit of this annual work, and indeed has much new matter to recommend it. The publishers have added, Aids in the diagnosis and treatment of the more common superficial ocular affections; a Diagram showing the eruption of the milk teeth, by Louis Starr a Posological Table from Guy's Hospital Pharmacopeia; and have retained all the useful information found in previous years' lists. Different sizes are published, that for 25 patients per day or week being $1.00; interleaved edition, 25c. extra. The binding is durable, and altogether the book is invaluable to the practitioner.

Transactions of the Association of American Physicians. Second Session held at Washington, D.C., June 2nd and 3rd, 1887. Vol. II. William Osler, M.D., Recorder, 1502 Walnut st., Phila.

In addition to the books already on our Special Club List, we have great pleasure in supplying the "Cottage Hearth," a worthy monthly periodical, with the Lancet at $3.50 per year. For special rates see advertising pages.

Researches in Electro-Alotropic Physiology. Uses of Different Qualities of Electricity to Cure Disease. By Jerome Kidder, M.D. Book of 111 pages, sent free upon application. Address, mentioning this journal, Jerome Kidder Mf'g Co., 820 Broadway, N.Y.

A useful pamphlet, containing selections from periodical medical literature and specific directions for the use of electricity as a therapeutic agent.

Births, Marriages and Deaths.

At New Westminster, B.C., Dr. Charles Newland Trew, aged 49 years.

THE CANADA LANCET.

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Original Communications.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT. *

For some years past I have endeavored to bring to the notice of the profession a view of the interrelations of nerve and muscle—more especially of the vaso-motor nerves and the arterial muscles—which is entirely at variance with what is taught in our physiological text-books. I should be unable to find any excuse or apology for attempting so bold a task, were it not that the proofs which I have to advance are drawn entirely from the authentic storehouse of physiological research. While the facts to be here advanced are the results of observation by the great masters in this department of science, I hope to be able to show, conclusively, that the inferences or interpretations placed upon these facts are in some instances erroneous, and ought to be modified or reversed. In the examples now to be cited of an erroneous interpretation of authentic experiments, the idea evidently dominating the physiological mind was that a stimulus from nervous energy is necessary to induce muscular contraction. As a corrollary to this idea, of course, it followed that when the motor nerve supplying a muscle was cut, or paralyzed from any cause, the muscle thus deprived of nerve influence was rendered incapable of displaying its contractile power. That such an idea was apparently justified by the behaviour of the *voluntary* muscles is undoubtedly true; but not so in regard to the non-striated or involuntary muscles of organic life, which have been pronounced by physiologists to be paralyzed and powerless, at the very moment that the observers saw and recorded the palpable evidences of their more or less active contraction. In fact, so far from the current teaching of physiology being true, as regards the relations of motor nerves to involuntary muscles, the very reverse is true; the actual fact being that *muscles of the involuntary class, as a rule, contract, not when stimulated by their proper motor nerves, but when these nerves are cut, or are paralyzed, or dead.*

* Read before the Physiological Section of the North International Medical Congress, held in Washington, September, 1887.

THE ŒSOPHAGEAL AND GASTRIC MUSCLES.

To come now to the facts. The statement continues to be repeated in each succeeding text-book on physiology, that section of the pneumogastric nerves (vagi) is followed by paralysis of the œsophagus and stomach. Now, on the theory uppermost in the minds of physiologists—referred to above—the œsophagus *ought* to be paralyzed here, and to be reduced to the condition of a mere flaccid tube. But that such is not the case, is evident from the fact that after the operation, food and drink fed to the animal, "in a few moments are suddenly rejected by a peculiar kind of regurgitation" (*a*). It needs no argument to prove that the sudden rejection of ingesta, in the manner stated, so far from being an evidence of paralysis, is really a proof of active contraction in the muscle. But it is said that sometimes the ingesta are detained in the œsophagus for a time, and, "owing to paralysis of this canal," are not conveyed into the stomach (*b*). Dr. W. B. Carpenter, F.R.S., refers to this by stating that "if the pneumogastric be divided in the rabbit, on each side, above the œsophageal plexus but below the pharyngeal branches, and the animal be then fed, the food is delayed in the œsophagus which becomes greatly distended" (*c*). Now the pharyngeal branches supply the upper part, and the œsophageal plexus, the lower extremity of this muscular tube. Mark what follows on section of the vagi between these two! The upper part of the œsophagus, whose nerves are intact admits the food and drink apparently in a normal manner, while the lower part of the tube, which has been deprived of nervous influence, contracts upon itself, and so lessens the calibre of the "canal" as to arrest the further passage of

(*a*) Dr. Dalton's Phys., p. 473. (*b*) Ib.
(*c*) Hum. Phys., 5th Amer. Ed., p. 404.

the superimposed ingesta, as a consequence of which the œsophagus "becomes greatly distended." Whether the ingesta are thus forcibly detained or "forcibly ejected" would appear to depend on the point at which the vagi are cut. But in either case, the result, so far from being a proof of paralysis, really bears evidence of activity of the muscle. And this is confirmed by the observation of Dr. M. Hall, that "the simple contractility of the muscular fibre [of the œsophagus] occasions a distinct peristaltic movement along the tube *after its nerves have been divided*, causing it to discharge its contents when cut across." [Italics mine.] (*a*).

Dr. Burdon Sanderson expresses the idea uppermost in the physiological mind, in stating that after section of the vagi "the muscular fibres of the œsophagus are paralyzed, so that regurgitation of food from the stomach is apt to take place" (*b*). Dr. W. B. Carpenter seems to pass over this part of the subject lightly, and it is not till treating of the effects of section of the vagi on the gastric secretions that he plainly states that "the first obvious effects of this operation are vomiting (in animals that are capable of it) and loathing of food" (*c*). He also tells us, in another place, that the re-opening of the cardiac orifice, on pressure from within, is one of the first of that series of reverse actions which constitute vomiting (*d*). It is evident that the "pressure" referred to and the force necessarily required to eject the contents of the stomach and œsophagus could not come from "paralyzed" muscles, which the facts show to be really undergoing active contraction. That nerve force is actually in abeyance in the act of vomiting was fully recognized by Dr. Anstie, who places it among the effects of paralysis of the medulla oblongata in narcosis (*e*). While the vomiting of migraine, he says, "marks the lowest point of nervous depression." (*f*).

Had those eminent physiologists, Drs. Todd and Bowman, doubts of the truth of the physiological theory of the day, and a prescience of what the future had in store, when they wrote: "The office of the gastric branches of the vagi nerves appears, from Dr. Reid's experiments, to be chiefly to *control* the movements of the muscular coat of the stomach. [Italics mine.] (*g*). That is precisely what the scope of this paper is designed to show —that in so far as the involuntary muscles, at least, are concerned, the function of nerve force is not to stimulate, but to restrain and control muscular activity; which all physiologists regard as an inherent endowment of muscular tissue.

THE BRONCHIAL MUSCLES.

Dr. Burdon Sanderson informs the readers of the "Hand-Book," that after section of the vagi "the muscular fibres of the bronchial tubes are in a similar condition" to those of the œsophagus and stomach (*h*). Then it is evident that the muscular bands come under the rule or law laid down above, and contract, like other muscles of this class, when deprived of nervous influence.

THE NASAL MUSCLES.

It is a curious fact, that "owing to the great size of the vellum pendulum palati, the horse is unable to breathe through the mouth" (*i*). As a consequence, respiration is carried on in this animal exclusively through his nose; and when both the facial nerves are cut, or paralyzed, "the nostrils immediately collapse, and the animal dies by suffocation" (*j*). A result very similar, so far as the closure of the nostrils is concerned, has occurred in the human subject, during paralysis of the facial nerve. Thus, Sir Thomas Watson, reporting the case of the girl, Jane Smith, says: "When she tried to snuff in air through her nose, not being able to keep the right nostril stiff and open, its sides came together, and no air passed up that side" (*k*). A little reflection will show that this is necessarily due to muscular contraction. The effect produced is not to be accounted for by any filling up or stuffing of the nasal passage by relaxed or paralyzed muscles, because the muscles are on the exterior of the cartilages, and mucous membrane or fibrous tissue does not contract or respond to nerve action. The obstruction is caused by the cartilages of the nose coming together, for which the only adequate explanation is the action of the constricting muscles, which, as in other similar cases, assert their power when nervous restraint is removed.

(*a*) Dr. Carpenter's Hum. Phys., 5th Amer. Ed., p. 404.
(*b*) Hand-book for Phys. Lab., Amer. Ed., p. 318.
(*c*) Ib. p. 423. (*d*) Ib. p. 404.
(*e*) Stimulants and Narcotics, p. 168.
(*f*) Neuralgia, p. 39.
(*g*) Phys. Anat., p. 493.
(*h*) Ib. p. 318.
(*i*) Strangeway's Veterinary Anat., p. 209.
(*j*) Bernard, quoted by Dr. Dalton, Phys., p. 458.
(*k*) Lectures, Prac. Physic, p. 366.

SPASM OF THE GLOTTIS DUE TO NERVE PARALYSIS.

We now come to a still more striking illustration of the truth of the proposition laid down above. The aperature of the glottis is closed by one set of muscles and opened or dilated by another. The constricting muscles are the arytenoidei and crico-arytenoidei laterales, while the dilators of the glottis are the crico-arytenoidei postici.

Dr. Burdon Sanderson states that "the widening of the glottis is a condition of general muscular relaxation." He further states that the closing of the glottis is equally due to a general contraction of all the muscles; so that the glottis is closed, "not because the postici crico-arytenoidei muscles and the other dilating muscles * do not act with the rest, but because they are overpowered by the constricting muscles (*a*). The situation thus depicted becomes quite remarkable and full of interest, when it is remembered that the sole motor nervous supply to both these sets of muscles passes through the inferior laryngeal (or recurrent) nerves, a branch of the pneumogastric, and that when this nerve is cut or paralyzed, the closure of the glottis takes place, as a result of spasm of both of the antagonizing muscles, as just stated. On page 318 of the Hand-book the same eminent physiologist, describing the effects of section of the vagi, says: "The glottis is partially closed, just as it is in death." How the glottis is closed in death will appear from the fact, vouched for by Dr. Austin Flint, in the 5th edition of his "Practice of Medicine," when he says, the operation of passing a probang within the larynx, "is extremely difficult, if it be practicable, on the cadaver" (*b*).

There can be no doubt about the effect of the section referred to being of a paralyzing character, so far as the nerve is concerned, seeing that the simple section of the nerve during life, and the extinction of all nerve force in death, lead to precisely the same results as regards the closure of the glottal aperture. Dr. Burdon Sanderson adds that, "in animals with divided vagi, life may be prolonged by tracheotomy," showing how complete and fatal is the spasm thus produced. Other evidence of similar import is not lacking. Thus, Dr. Austin Flint, discussing the "danger of death from suffocation" in the "obstructed inspiration" occurring in nervous aphonia, says: "The condition is analogous to that after the physiological experiment of dividing both recurrent laryngeal nerves" (*c*). The same author has "reported a case in which the left recurrent nerve being situated betwen a calcareous deposit and an aneurismal tumor, spasm of the glottis occurred so frequently and to such an extent as to prove fatal" (*d*).

Now, since the recurrent nerve is the only motor nerve supplying these muscles, and since section or pressure on a nerve trunk cannot increase nerve activity—the nerve trunks being mere carriers and not producers of nerve force—it is evident that no other conclusion is possible than that the spasm here referred to is due to the absence of nerve force, and not to a stimulus from excited nerve action. And since nerve paralysis is thus shown to be directly the cause of spasm of the glottis, is it not necessary to infer that whatever is done by reflex action to cause spasm of the glottis must be of a paralyzing character to the nerve also? Thus, what is vaguely called "irritation," by which is usually meant an excitation or exaltation of nerve power, and which consists really in a perturbation of nerve force, must necessarily be an influence of a paralyzing character to the nerves it traverses. Such reflex "irritations" are usually attributed to brain lesions, to indigestible food, and other causes of a more or less debilitating character which may well arrest, rather than develop, the flow of nervous activity.

If it be true, that pain is "an expression of impeded and imperfect nerve energy, not of heightened nerve function," for which there is high authority (*e*), how much more is the perturbation of the nerve molecules, which constitutes "irritation," a disturbance of normal activities which is equivalent to paralysis.

RELATION OF VASO-MOTOR NERVES TO THE ARTERIAL MUSCLES.

I propose to show here, on the very best physiological authority, that what is known as "paralytic hyperæmia" is—contrary to the accepted opinion—venous and not arterial.

I need not delay to offer proof that the middle muscular coat of the arteries is under the control of the vaso-motor nerves of the sympathetic, which regulate the calibre of these tubes; or that the

* There are no "other dilating muscles" than the crico-arytenoidei postici.

(*a*) Hand-book, p. 308. (*b*) Ib., p. 294.

(*c*) Prac. of Med., 5th Ed., p. 309. (*d*) Ib., p. 371.

(*e*) Anstie, "Neuralgia," pp. 12 and 163.

chief vaso-motor centre is in the medulla oblongata, with probably lesser centres in the spinal cord. These are among the well-authenticated facts of recent physiology. It is in determining the action or play of this mechanism, that I have the temerity to claim that our physiologists have made an "unscientific use of the imagination." The theory of the text-books is that when the influence of the vaso-motor centre is cut off from the arterial muscle in any way, hyperæmia of the arteries results. Thus in destruction of the nervous centres by the operation of "pithing"—as a result of section of the spinal cord just below the medulla, and on section of the chief vaso-motor nerve trunks, in the body or viscera, it is claimed that the corresponding arteries are more or less dilated. Dr. Burdon Sanderson contents himself with stating that under these circumstances, "the arteries are relaxed," and again, that they "become permanently larger" (*a*). Other physiological teachers, such as Prof. Kuss, say that here the arteries are "dilated," while Dr. Sidney Ringer, in his excellent "Therapeutics," has it that "the arteries remain widely dilated" (*b*). We shall presently see how far these statements are justified by the facts.

SECTION OF THE CERVICAL SYMPATHETIC.

To M. Claude Bernard and Dr. Brown-Sequard we are largely indebted for what is known on this subject, as observed by them in the famous experiment on the cervical sympathetic. Dr. Brown-Sequard enters into the details at great length in his "Physiology and Pathology of the Central Nervous System." Yet nowhere in this work, in regard to this or any other section of cord or nerve, does he once assert that the arteries are dilated. In the pages devoted to it he refers to the contemporary experiments on this subject by Waller, Donders and his pupils, by Kussmaul and Tenner, Moritz and Schiff, yet he makes no mention of an allusion to dilated arteries by any of these eminent observers. This is surely significant. With him it was always "the blood vessels" which are "paralyzed" and "the blood vessels" which are "dilated." He says that "the hanging down of an animal, by holding it up by its hind legs, in producing a congestion of the brain, produces very nearly all the effects of this section" (*c*).

From these considerations it will be evident, first, that it was by no means apparent—was indeed a matter of great difficulty to determine accurately what particular "vessels" were enlarged, hidden as they mostly were beneath the skin and its subjacent tissues. Nay, it is not too much to say, that the statement that it is the arteries that are enlarged is purely hypothetical, and not based upon an actual demonstration of the facts. Secondly, it will be also evident from the statement just quoted from Dr. Brown-Sequard, that venous hyperæmia, the result of the blood being forced out of the arteries by their partial contraction, "very nearly accounts for all the effects of this section." The truth of this will not only appear from what is to follow now, but from the effect of other sections to be noted. Notwithstanding an increased afflux of blood, and consequently a relative elevation of temperature, with heightened sensibility, "the intimate acts of nutrition appear to be modified in nothing. . . . Nor does it appear that this hyperæmia, however intense or prolonged it may be, has ever the effect, save under exceptional circumstances, of determining by itself the development of inflammatory action" (*d*). This could hardly be the case if the hyperæmia were arterial.

Among the effects of this section on muscles, as recorded by Dr. Brown-Sequard, are contraction of the pupil, retraction of the eye-ball, partial closing of the eye-lids, contraction of "almost all the muscles of the eye," and also of the muscles of the angle of the mouth and nose; contraction of the erectile muscles of the ear, and others. Now, seeing that it is *contraction*, and not relaxation of all these muscles, which follows section of this nerve, the law of analogy would require that the muscles of the arteries supplied by this nerve be contracted also; otherwise the anomaly would exist of the same nerve producing contraction in a large number of muscles and relaxation in a single instance. Why should the arterial muscle be regarded as an exception among so many others, especially when all the facts of the case are compatible with arterial contraction and venous fullness?

As for the second part of the experiment, in which the hyperæmia is dissipated by faradization of the distal end of the cut nerve, that is easily accounted for. The terminal branches of the cut

(*a*) Hand-book, pp. 245-256.
(*b*) 6th Amer. Ed., p. 312. (*c*) Ib., p. 143.
(*d*) M. Charcot, Lect. Nerv. Sys., pp. 90-91.

sympathetic evidently influence the muscles of the the head and face over a wide area. As is well known, the effect of faradization is to set up a succession of rapid contractions and relaxations in muscular tissue. The pressure thus brought to bear on the swollen veins would amply suffice to force their contents onwards, and thus to dissipate the venous congestion. Examples of this very result are not lacking. Thus when Kolliker applied one pole to the umbilical artery and vein of a fresh human placenta, there followed contractions by which the veins forced out their contents and changed into bloodless strings" (*e*).

The following quotations from Rosenthal's "Diseases of the Nervous System," Vol. II., Wood's Library, have a peculiar fitness here; "Kussmaul and Tenner have shown in a series of experiments, by placing a watch-glass in the opening of a trephined skull, without allowing the air to enter (Donder's plan), that compression of the carotids causes capillary anæmia and venous hyperæmia of the brain and meninges" (*f*). "In Verneuill's patient, upon whom ligature of the carotid was performed for a tumor of the parotid gland, persistent contraction of the pupil developed shortly afterwards, with rise of temperature and vascular dilatation upon the temple and gums, and abundant perspiration upon the side of the face, corresponding to the operation. All these symptoms can be produced experimentally upon animals by dividing the cervical sympathetic" (*g*).

Here is a remarkable proof that the section referred to causes arterial contraction (and not dilatation), seeing that the other effects of the section are equivalent to those produced by ligature of the carotid.

(To be continued.)

CROUPOUS PNEUMONIA, AS FOUND IN VARIOUS PARTS OF THE DOMINION OF CANADA.*

BY WALTER B. GEIKIE, M.D., C.M., F.R.C.S.E., L.R.C.P.L.
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I do not for a moment propose to bring a subject so familiar as Pneumonia before the medical section of this International Medical Congress.

True, no disease attracts more attention, or is more widely known in both hemispheres, and on this account it occurred to me as desirable, in addition to my own observation, to obtain by correspondence, as far as lay in my power, some information regarding the prevalence and peculiarities, if any, of croupous pneumonia, as found throughout Canada, from the Pacific on its western, to the Atlantic on its eastern shores. It further seemed more than likely that a short paper referring to a subject so practical and of such widespread interest as inflammation of the lungs, would be certain to elicit the views and experience of many members of the Congress, and in this way prove of great practical utility.

It would be out of the question to detain the section, by reading in detail either the queries submitted by me to various medical men throughout Canada, or the replies received to these.

The main point desired was to ascertain the *frequency* with which the disease was met with in different parts of the country, remote from each other—and the form or forms it is wont to assume under very varying climatic conditions.

From British Columbia on the western coast I learn—and may say that the information received so far has been chiefly from the New Westminster district—that pneumonia is *not* of very frequent occurrence. That when met with, especially in the larger towns, it is as an accompaniment of some other form of disease. In other words, that it is a *secondary* much oftener than a primary affection, and as the disease with which it is most frequently associated, is typhoid fever, many of the cases are prone to assume a very low form.

Acute cases, however, occur from time to time, but are said by my correspondents to be not nearly as common in that region, as the complicated low type just referred to.

Coming eastward into the as yet very partially known and exceedingly sparsely inhabited regions of Alberta and Assiniboia, pneumonia is said not to be common. Query—Is this not because settlers are as yet so few in these vast territories?

I am also informed that it has never appeared in those parts as epidemic, as it is reported and believed to do occasionally in some older and more fully settled localities. Practitioners there find it a purely primary disease, an acute inflammation of the lungs, pure and simple.

(*e*) Meyer's Elec. Hammond, p. 88. (*f*) Ib., p. 64.
(*g*) Ib., p. 26.

*Read at the International Medical Congress held at Washington, D.C., U.S., September, 1887.

It is important to bear in mind that in British Columbia, as well as over the entire Canadian North-West, reaching from the eastern side of the Rocky Mountains to the westerly limits of Ontario, *malaria*, which, wherever found, so largely influences every disease, is practically non-existent.

In all the vast tract just spoken of, pneumonia is met with more or less frequently in proportion to the number of people settled in *particular* localities. It is, as in *almost*, if not *every* other place, found to take the *acute* form in *scattered* settlements, and not seldom a *lower* form in towns and villages, particularly in those which are increasing very rapidly in population. The explanation of this, I take it, is not far to seek. Population in American and Canadian communities often increases with great rapidity, while the carrying out of efficient sanitary regulations takes much time, and what is more scarce than even time in all new places, a good deal of money. The fact, now happily becoming more and more familiar, that as sanitary measures are perfected, *low* forms of pneumonia, and of all other diseases, tend greatly to decrease, abundantly verifies this observation.

Coming still eastward through Ontario, pneumonia is found to occur frequently and in an acute form at certain seasons—chiefly towards and during spring, especially in rural districts.

As we would expect, many cases present themselves in which more or less blood-poisoning co-exists with the local inflammation, giving them often a somewhat asthenic character. As we pass into the more southerly portions of Ontario, malaria becomes a very important factor, not in pneumonia alone, but also in every other disease, modifying not the type only, but the entire course of the cases very considerably.

From districts more or less malarious I have received conflicting reports as to the frequency of pneumonia, but learn, that in a very large proportion, given by some as high as *two-thirds* of all the cases, the disease tends to assume a *low* form.

This is very markedly the case in some of our cities; in Toronto, for example, where, during the last winter and spring, pneumonia has been very prevalent. Owing to the particularly low form of many of the cases, an unfavorable termination has occurred in a much larger proportion than for several years past. It attacked not only the weak and broken down, but many young and middle-aged persons as well, who, prior to the attack, had been vigorous, and of ages varying from 15 to 35 years. Weakly and broken-down constitutions and persons advanced in life sank, in many instances, after only a few days' illness, in spite of every effort made to save them. *General* and excessive prostration was its principal feature. According to some of my correspondents who kept an accurate record, the cases were so numerous, that the disease, or as some under the circumstances would call it, the specific fever accompanying the pneumonia, appeared to be *contagious*. For example, one of our most experienced hospital authorities, speaking from his own observation, says, nearly all the cases he saw last winter and spring presented the same low type. He found several instances of two or three cases coming from one house—each case running just the same course—one often falling ill a short time after the other. It is a pity the exact periods at which the illness began were not observed. In every one of them the pneumonia was very marked as well as extensive.

From several other cities of considerable population a similar report might be given, especially of the pneumonia of last winter, as to its frequent occurrence and the low type it assumed.

The asthenic form prevalent from year to year in our Ontario cities, where we do not have the very low winter temperatures reached in Quebec and in the North-West, is very striking. I know that in Toronto, as in other cities on this side of the Atlantic, amongst the poorer classes, exhaustion from overwork or underfeeding may and does exist, but happily only to a comparatively slight extent. And I freely and sadly admit that prostration of the system to a *far greater* extent is due to alcoholic and other excesses; but making liberal allowance for all such cases, have *imperfect drainage, more or less impurity in the drinking water*, and malarial poisoning, not much more to do than all other causes combined in giving rise to this particular type of disease?

In the more northern portions of Ontario the pneumonia record from rural districts, villages and towns is just what might be anticipated. The disease is frequently in strictly rural parts, acute, but presents a much less active, and often even a *low form* in lesser, or greater centres of population. Coming to the Province of Quebec, we learn that

in Montreal, the most populous city in Canada, pneumonia is frequent, and is, as a rule, as my best correspondents inform me, *acute* in form. Unless in feeble persons, young or old, or amongst the intemperate, the asthenic forms of the disease are seldom met with. The *very* low form, thought by some to be contagious, on which some of my correspondents in Toronto and in some places west of that city have laid great stress, is said to be exceedingly rare in Montreal, and its presence there as an epidemic is strongly questioned.

As is the case throughout the entire North-West, so malaria is practically unknown in the Province of Quebec. The small amount of it met with, occurs in persons who have entered the province from malarious localities in the west or south.

There is little doubt in my mind that to this absence of malaria, as well as to a considerable similarity of climate, is due the fact that the pneumonia met with presents much the same characteristic features in these widely separated regions.

Coming still further eastward, and seaward, we notice very briefly the disease in Prince Edward Island. This little insular province, presents in summer in most parts, the very perfection of natural beauty, although perhaps the less said about it in winter, the better. Pneumonia of an *acute* type is reported as frequent, more so during some seasons than others Some of my esteemed correspondents refer to the cases being at times so numerous as almost to justify the view that it prevails epidemically.

As in type, course and frequency of occurrence, pneumonia is just the same as a rule in New Brunswick, Nova Scotia, and in the old colony of Newfoundland, with its appendage, Cape Breton, as in Prince Edward Island, it is needless to do more than mention that in *all* these provinces the form commonly seen in country parts, is the *acute*. *Now* and *then* due, as elsewhere, doubtless, largely to local causes, cases are seen in towns and cities of a very low form, which tax to the utmost the skill of the medical attendants.

In this paper I purposely omit any reference to the portions of the reports sent me, regarding the theories held as to the nature of the disease—whether it is a *local affection only*, attended with symptomatic fever, or a *specific form*, of which the local dicease is a mere accompaniment. Neither will I speak of the treatment of pneumonia adopted in different parts of Canada.

To enter on these topics would make this paper altogether too long—and long papers, like too long sermons, are not consistent with the brevity of human life, and nearly always make listeners sleepy, rather than interested.

I may, however, be permitted to say here, that many authors, some of whom are very justly esteemed and have great weight given to their views by the profession, are *on the one hand* rather too *brief* and *general* in their remarks on the *treatment* of this disease; and on the other, frequently do not, as it appears to me, bring into sufficiently bold relief the sound principles which underlie the largest measure of success. These are admirably laid down by Mr. Erichsen in his great work on surgery, where he treats of the management of inflammation in general (See Vol. I. last American Edition, p. 225). It seems unusual to refer to a work on surgery in a paper on a purely medical subject, but Mr. Erichsen's remarks are by no means seldom quoted approvingly by physicians. I will not detain you by giving the passage in full. The author strongly and very properly objects to all inflammatory diseases (and pneumonia is one of them) being treated on any *uniform* plan, whether by depressants or by stimulation. As regards management of cases of pneumonia, no remark can be more practical or valuable than this, that so far as successful treatment goes, "*it is of far greater importance to be able to estimate accurately the constitutional condition of the patient, than to be able to form a minute diagnosis of the precise extent and depth of the local mischief.*" We, therefore, in Canada, as elsewhere, use *repressive* means in one case of pneumonia and *stimulate* more or less freely in another. Or often, in the same case, after judiciously repressing existing vascular over-activity for a *short* time, we *may*—indeed, if it be called for, WE MUST support and stimulate to any required extent. This varying of the means to be adopted in particular cases at particular stages, calls for the exercise of the greatest judgment and all the knowledge we possess; but it is the only practice which can secure the best results to our patients, and at the same time most redound to the credit of medical science. Such practice is no mere routine, but a strict following of medical science, properly so-called.

For the many answers to my queries received from medical friends throughout Canada, I beg, without naming them, for that they might not like, to return my very sincere thanks.

I am fully aware of not having been able to gather anything new, or at all striking, from any quarter of the wide field gone over, and I did not expect to do so. But to make the enquiries and to get answers from so many parts of the Dominion interested me greatly, and I hope the subject may not prove altogether devoid of interest to those who have done me the honor of being present. I heartily thank the medical section of the Congress for their patient hearing of this paper. I have only to regret having had too little time at my disposal to make my researches as exhaustive as could have wished, over an area comprising many thousands of miles, stretching as it does across the western part of the American continent, and presenting climatic and other differences, great, in proportion to its vast extent.

TREATMENT OF POST PARTUM HEMORRHAGE—BY INTRA-UTERINE INJECTION OF BRANDY OR WHISKEY.

BY J. ALGERNON TEMPLE, M.D., TORONTO.

Post-partum hemorrhage is much less frequently met with to-day in practice than formerly, since the introduction of uterine compression during the latter part of the second and third stages of labor as the most powerful preventative against this alarming accident. Yet now and then, in spite of all our efforts, we will occasionally have to treat it. Some years ago I drew attention through the medical press of this country to the inestimable value of the intra-uterine injection of pure brandy or whiskey as being a most powerful and prompt uterine contractor, and far superior to any other agent I have ever used, hot water or iron not excepted, and free from the dangers attending the use of iron; it does not coagulate the blood in the mouths of the uterine vessels and expose the patient to the danger of death from embolism, but merely produces the most powerful and prompt uterine contraction. Within the last week it has been my misfortune to come across two very severe cases of post-partum hemorrhage. In both cases I tried hot water, as hot as I could use it, without producing the desired contraction, and in one case I treated only last night, I feel very sure had I not used brandy as an intra-uterine injection I would have lost the patient, a delicate woman, second child; who had been in labor about twelve hours, and after the birth of her child she seemed much exhausted and prostrated. The placenta came away shortly after the child's birth, but the uterus did not contract. I emptied it three times with my hand and injected copiously very hot water, without producing any effect whatever. I finally injected a tumbler full of pure brandy. The action of contraction was almost instantaneous; the uterus became hard and firm, and remained so. Not only does it produce rapid contraction, but its stimulating effect on the heart and pulse is generally noticed. I think undoubtedly it is also absorbed into the blood. In all cases in which I have used it, the patients express a sensation of warmth and comfort in the uterine region, so unlike the chilling effect after the use of ice.

Before its use the uterine cavity must be cleared out of all clots, and then inject a tumblerful of pure brandy—whiskey will answer as well. To those practitioners who have not tried this plan of treatment, I most heartily commend it.

Dec. 13th, 1887.

THE QUESTION OF ABSCISSION OF THE TONSILS.

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An experience, ranging over a considerable number of years, has taught me that there is hardly any matter connected with the practice of medicine about which exists greater divergence of opinion among practitioners, and of which more superstitious fear is felt by the laity, than of the operation of removal of the tonsils. For an explanation of this feeling amongst the laity, I am inclined to believe that we must look to the ancient belief that the tonsils were, in some occult way, connected with the testes, just as the external ear was supposed to be; and hence, thieves were deprived of their auricular appendage partly as a mark of disgrace, but more probably with a view to preventing the propagation of their kind. The profession have perhaps, to some extent, inherited

this belief, which was incorporated by the early medical writers with other fanciful theories in their works. The questions before us are :—1st. When should the tonsils be abscissed? and 2nd. When is it safe to resort only to medicinal measures—local or constitutional?

1. To consider the first question, it is necessary to briefly recall what ill a hypertrophied tonsil can do.

The effect of enlarged tonsils on the *voice* is to render it "throaty" in quality, to impair its resonance, and to interfere with the production of the higher notes of the scale requiring lifting of the soft palate and closure of the naso-pharyngeal space. Hence, it is a serious matter for vocalists. The *hearing* is very apt to suffer by the extension by contiguity to the Eustachian tube, by enlargement also of the pharyngeal tonsil (gland of Luschka), actual pressure is occasionally exerted on the tubes. Irritation also of the tube tends to keep up purulent discharge, if already present. After a certain time organic change takes place in the tympanic cavity, which cannot be remedied. "Of all the evil results," says Sir Morell Mackenzie in his Treatise on the Throat, "attendant on hypertrophy of the tonsils, those due to interference of the diseased masses with free *respiration* are the most serious. The partial occlusion of the nasal channel posteriorly by the enlarged tonsils obliging the patient to keep his mouth almost constantly open, renders him unusually exposed to all the external influences which produce inflammatory affections of the respiratory tract, whilst the persistent obstruction to respiration leads to serious changes in the thoracic parietes. . . . In childhood the bones yield easily to such influences, and anyone who has witnessed the difficulty of breathing which occurs, especially during sleep, will readily understand how pernicious may be its effects on the respiratory apparatus. In addition to the organic alterations in the bones of the chest, other evils are brought about, and Chassaignac well observes that although increased efforts of the diaphragm, to a certain extent, neutralize the impediment to respiration, there are frequent intervals when the powers become temporarily exhausted and the *oxygenation of the blood* is very incompletely performed. The vital forces are in consequence very much lowered, the patient lives in a state of permanent ill-health, and easily succumbs to any acute attack of disease, particularly if affecting the respiratory organs."

The effect on the *physiognomy* is too well known to require any remark from me. It will be noticed that the ill effects of enlarged tonsils are mechanical in nature and due to interference with function by *mechanical obstruction* chiefly.

It may then be laid down as a rule that when enlarged tonsils are interfering with proper respiration or hearing, or are subject to relapsing acute inflammations, they should be removed. When the voice is impaired by them, it might be optional, depending on the patient's occupation. It should be borne in mind that, if long continued, the ill effects of enlarged tonsils are *permanent* in their nature.

The answer to the second question is then easy. When the general health is not impaired and there is no interference with important functions, the tonsils may be submitted to medicinal treatment. I may remark in passing, that the drug I have found most useful in causing tonsils to subside is Hydrastis Canadensis, applied in rather strong solution of the fluid extract. Astringents and iodine are often disappointing and uncertain.

As regards the mode of operation, the guillotine of Mathieu is the best in my experience. Mackenzie's guillotine has disadvantages which Mathieu's has not. Very large tonsils, and long, narrow tonsils, extending down almost to the larynx, must be removed by the vulcellum forceps and blunt pointed bistoury. I have never met with serious hemorrhage, and am inclined to think the danger much over-estimated. A mixture of one-third gallic and two-thirds tannic acid, applied dry with the finger, will stop any ordinary bleeding.

Correspondence

OUR LONDON LETTER.

(From Our Own Correspondent.)

London, Dec. 7th, 1887.

SOME METHODS OF TREATMENT.

At the Hospital for Women, Soho Square, during the past year, Dr. Oliver has been markedly successful in the treatment of uterine displacements by means of vaginal medication, having discarded

the use of pessaries in all cases except those of extreme prolapsus, where the original walls are past all hope of being restored to their normal tone. He claims that we have too long ignored the absorbent power of the mucous membrane of the vagina, and points out that the method of administration of remedies by vaginal suppositories is especially beneficial in pelvic derangements. In cases of retroversion, retroflexion, anteversion, anteflexion, and recent or partial prolapsus, no method of replacement is adopted, the following suppository being relied upon entirely :—

℞.—Quin. hydrochloras, ... grs. iij.
Digitalin, ... gr. $\frac{1}{60}$.
Strychniæ, ... gr. $\frac{1}{32}$.
Glycerine jelly, ... q.s.

Sig.—One to be used every night, per vagina, followed in the morning by a warm vaginal injection ; in bad cases two suppositories daily are used. In the great majority of cases, I have observed during the past three months, the distressing symptoms common in these conditions have been speedily relieved and the uterus has recovered its normal tone, and in many its position.

In cases of climacteric diabetes, etc., at the same hospital, I have seen the following pill used with marked success :—

℞.—Codeia, ... gr. $\frac{1}{4}$.
Conf. rosæ, ... q.s.
Sig.—One to be taken three times daily.

In those troublesome cases of severe pruritus of the vagina, the following gave relief after other remedies had failed :—

℞.—Cocaine, ... grs. x.
Chloral, ... grs. xij.
Glycerine, ... ℥j.
Sig.—To be applied three or four times daily.

In cases of general fibroid change of the uterus, the following is prescribed with beneficial results :

℞.—Ext. ergot liq., ...
Tr. ferri perchlor, ...
Spts. chloroform, ... āā ♏ x.
Aq. ad. . . . . ℥j.
Sig.—To be taken every four hours.

In cases of plastic pelvic-peritonitis, the following, together with warm vaginal injections, has proved to be a very effective treatment :—

℞.—Calcii chlorid, ... grs. x.
Glycerine, ... ℥ss.
Infus. quassiæ, ... ℥j.
Sig.—To be taken three times daily.

Iodol is becoming more largely used in several of the hospitals here, and is found to be an effective substitute for iodoform, having the additional advantages of being nearly odorless, tasteless, producing no constitutional effects, and of containing almost as large a percentage of iodine, which it parts with more freely. It has proved to be antiseptic, anesthetic, a promoter of granulation and healing, to check suppuration and deodorize foul secretions ; in fact it possesses all the therapeutical virtues of iodoform, without its unpleasant drawbacks. I have seen it used with prompt benefit in cases of atonic, syphilitic, and corneal ulcerations and other purulent conditions. It is an especially useful application in throat affections, such as phthisical laryngitis, and other ulcerations of the inter-arytenoid fold, the vocal cords, ventricular bands, and in almost all laryngeal, pharyngeal, nasal and aural cases where a catarrhal or ulcerative condition exists. Daily or tri-weekly insufflations of the pure powder of iodol may be used, freely covering the diseased surfaces. The best brush application is the following : Iodol, 1 part ; alcohol, 16 parts, and glycerine, 34 parts ; while the best for use as a spray is as follows : Iodol, 1 drachm ; ether, 1 ounce. This makes a light brownish mixture, the ether of which evaporates quickly, leaving the iodol upon the affected surface In all cases it is, of course, essential to first thoroughly cleanse the diseased surfaces, and for this purpose the following lotion is the most useful :—

℞.—Sodæ bi-carb., ... grs. xv.
Acid carbol., ... grs. jss.
Aq. . . . . ℥j.

Iodol pastiles, consisting of iodol, 1 grain ; glycerine, 1 minim, and glycogelatine, 18 grains, are very beneficial in chronic pharyngeal affections.

CANADIAN.

Selected Articles.

ADDRESS ON THE OPENING OF THE NEW YORK CANCER HOSPITAL.

BY FORDYCE BARKER, M.D., LL.D.

The opening of a new hospital in this city, the first in this country and the second only in the world, devoted exclusively to the treatment of cancer, is an event of such importance that I greatly regret that the selection of a person to give

e address had not fallen upon one more compe tent to do justice to the occasion. But some considerations have been forced upon me which seem to make it an imperative duty to accept the position, and throw myself on your kind indulgence. One inducement which had its weight on my mind is the fact that I do not profess to be a surgeon, and as the wonderful progress made within the past decade, in the successful cure of many cases of cancer which before would have been left to die a miserable death, have been in the domain of surgery and the result of surgical proceedings, I can speak of these without any imputation of self-laudation.

My purpose is simply to show the necessity for and the usefulness of such a hospital—to impar some knowledge of the nature of this terrible disease, cases of which will seek relief and cure within these walls, and to correct some popular errors in regard to it which seem to be almost universal, and which the profession well know have caused an incalculable amount of unnecessary misery and unhappiness in the world. It is to be confidently hoped that the good which this hospital will eventually accomplish in the relief of unhappiness and suffering will be represented only in a minor degree by its future inmates, but will extend to many thousands who will never be within its walls.

As preliminary to what I am about to say, I may be permitted to define some words which are in general use by the public in a sense quite different from their professional use. The word tumor, when applied to any abnormal enlargement in any part of the system, is one which carries terror to the minds of most patients, who often consult their physician because of an avowed apprehension that they have a tumor. The word tumor is nearly but not exactly identical with the word swelling, and carries to the professional mind no significance as necessarily implying danger to life. We speak of glandular tumors, fatty, cellular, or fibrous tumors as innocent or benign, meaning thereby that they are purely local growths having no tendency to extension by formation of other growths, and that if removed they are gone for ever. But we also have what are called malignant tumors, which involve a destructive degeneration and gradual invasion of adjacent tissue, and which may finally infect the general system and destroy life. Cancer, using the term in a generic sense, is a typical form of malignant tumor. It is probable that this was first observed and studied as an external disease. The name is said to have been given to this affection by Galen, who lived in Rome in the latter part of the second century and was a physician of great eminence, and one of the most accomplished and learned men of his age. From a fancied resemblance of the appearance of the disease as it extends itself into adjacent healthy tissue to the claws of a crab, he gave it the Latin name of crab—namely cancer. Since his day the name has been universally adopted both by the medical profession and the public, and is popularly applied to all forms of the so-called malignant growths, such as scirrhus or hard cancer, encephaloid or brain-like cancer, epithelioma, the rapidly growing infecting and recurrent forms of sarcoma, and other varieties, which may differ much in structure and in their clinical features. The malignancy which is the common characteristic of all, justifies the long-continued popular usage of the term cancer to cover all these diseases, and all come within the province of this hospital to treat. I will briefly refer to some of the peculiarities of this group of diseases which distinguish them from all others. They have for some years been gradually increasing in frequency and causing a larger proportion of deaths in those nations which are the most advanced in civilization.

In the "Forty-first Annual Report of the Regis ter-General of England," published in 1880, it is asserted that the number of deaths from cancer was 5,218 in 1851, and 12,664 in 1878; but as the population had largely increased in this period, the increase in frequency will be more distinctly appreciated by the following quotation from this report: "The average annual mortality (from cancer) during the five years 1850-'54 was 304 in one million living. In the five years 1870-'74 it was 443, while in the year 1878 it was 512."

In New York city the proportion of deaths from cancer in 1875 was 400 to the million. In 1885 it was 530 to the million. According to the "Reports on Vital Statistics of the Census of the United States of 1880," the proportion of deaths from cancer to the total number of deaths reported from known causes was 36·68 to the thousand.

Cancer is a disease of advanced age. It is found in all ages, but in very unequal proportions. In 8,193 cases the proportion of deaths under five years of age was 15·95 in a thousand, while from five to ten it is only 2·82 in a thousand, and from ten to fifteen 1·60 in a thousand. From the age of fifteen the proportion gradually rises in each quinquennium, until, between the ages of fifty and fifty-five, it reaches 130·18 in a thousand. After this period the proportion gradually diminishes as the population who are living after this period of life diminishes. Mr. Jonathan Hutchinson, of London, whose opinion on all questions of pathology is considered authority by the profession in all parts of the learned world, in the most able discussion which has ever been held on this subject, that before the Pathological and Clinical Society of Glasgow in 1886, said: "Of the causes which underlie the proclivity to cancer, and which render some races and some families more prone than others, we as yet know but little. What little we do know would lead us to believe that it has no-

thing to do with diet or with climate. The herbivorous animals are liable to it as well as the carnivorous, and, so far as I know, it prevails in all parts of the world where the conditions are favorable to longevity. Wherever, from whatever cause, they are not so, there cancer becomes relatively infrequent. It is almost unknown in those of our domestic animals which are used for food, for the simple reason that we never let them grow old, while in dogs, cats, horses and asses it is common."

Dr. Billings says: "The increase of mortality from cancer with advancing age may be explained either on the theory that the cause of cancer becomes more potential in advanced age at the period of physiological decay, or on the theory that the predisposition to cancer belongs to the strongest and longest lived." The fact is settled beyond question that in those populations where but few reach old age cancer is proportionately rare. There are some curious and interesting facts in regard to the geographical distribution of cancer which science as yet does not satisfactorily explain. The last census of the United States demonstrates that this disease is especially prevalent in the New England States and on the southern Pacific coast; that it is prevalent in New York, Pennsylvania, Ohio, and in the interior of Michigan and the southern part of Wisconsin; that it is least prevalent upon the Mississippi and in the South, and that the proportions are generally lower in the coast regions than in the interior. An examination of the reports of death from cancer in England and Wales made by Dr. Havilland led him to conclusions quite in accord with those derived from our own census. Both banks of the Tweed near Berwick, and of the Tyne at Newcastle, some parts of Yorkshire, and the whole of the beautiful Lake District, are fertile beds of cancer. The Isle of Wight is all but free from this disease, while it is common in Brighton, Folkestone, Dover, Ramsgate and Margate. Statistics also demonstrate, as other facts have seemed to prove, that density of population, poor living and laborious toil have very little to do with the development and appearance of cancer. Thus in London, in which, as a whole, cancer is very prevalent, the parish of St. Luke's, the neighborhood of Bishopsgate Street, crowded Bethnal Green, the Isle of Dog, Rothershithe and Bermondsey are almost exempt from this disease, but in the respectable part of the metropolis, about the Marylebone Road, Regents Park and Primrose Hill it is exceptionally frequent. Liverpool, which has a large mortality from other causes of death, as shown by the fact that, with a population of 552,000 in 1878, the number of deaths exceeded those of the total number of its births by 1,000, the percentage of deaths from cancer was exceptionally small. In the future it may be discovered that the localities where the prevalence of this is most frequent have certain characteristics in common which science may overcome, and thus notably diminish this tendency in such localities.

In the "Report on the Vital Statistics of the United States of the Tenth Census in 1886," it is remarked that the peculiarities of the differences in the mortality from cancer in different localities may be in part explained by differences in the population of these localities as regards race and age. It is a disease which is much less frequent in the colored than in the white race, hence the mortality from it is greater in the North than in the South. It causes the greatest proportion of deaths where there are the greatest proportion of people of advanced age—that is to say, in the New England States. Hence in any given locality, a large proportion of deaths from cancer indicates to a certain extent that the locality is a healthful and a long-settled one, and has a large proportion of inhabitants of an advanced age. Cancer is not a disease due to misery, to poverty, to bad sanitary surroundings, to ignorance, or to bad habits. On the contrary, it is a disease of the most highly civilized, the most cultured, the wealthy, and of localities which are the most salubrious. One of the characteristics of cancer is that, unless the brain is involved, it leaves intellectual power and force unimpaired. Nay, it seems that in some cases it almost increases these qualities. No pathetic incident is more indelibly stamped on my memory than a visit made to a victim of this disease whom I found, as I often had before, seated at his writing table, his drawn, pallid face expressing fatigue and suffering, but still more expressive of will force and a remarkable power of endurance. "Excuse me," he said, as I entered the room, "until I finish a paragraph I have just begun." After a few moments he laid down his pen, saying, with a sad gleam of satisfaction, "There, since your visit yesterday I have written eight pages." After the commencement of his painful illness, stimulated by the hope of overcoming reverses and leaving his family in circumstances to which their former position entitled them, he succeeded in accomplishing a larger amount of work, and receiving a greater pecuniary reward for it, than in the history of the world was ever before attained for literary work in so short a period of time.

Census reports are to most persons uninteresting, and the value of the two large volumes of the last census which relate to the vital statistics of this country can be appreciated by but few persons; nevertheless, I wish to call your attention especially to the importance of these books, and to the remarks in which Dr. J. S. Billings, of the United States Army, under whose direction they were compiled, sums up the conclusions which may be drawn from them, and points out the way in which such statistics should be extended, improved, and made reliable as a means of increasing our knowledge of the causes of pain and death, and of

the means of destroying or of diminishing these causes.

The belief has been almost universal, both with the profession and the public, until within a comparatively recent period, that cancer has generally a hereditary origin. It is probable that no doctrine in regard to the cause of disease has given rise to so much and so causeless misery and unhappiness in the world as this. In those who have some symptoms which they suspect to indicate the beginning of this disease, suspicion becomes a conviction if any relative of a former generation has died of cancer. They may almost be said to begin the pangs of a moral death long before it is demonstrable that physical death is inevitable from this cause. If the patient has any family history of this disease, and is suffering from any acute or chronic affection, attended with symptoms which he has heard exist in cancer, the effect of this conviction is not only most depressing, but dangerously complicates conditions which otherwise might result in recovery. I have personally known many illustrations of the truth of both of my two last assertions. Again, I have more than once been asked, in those pathetic tones which tell of heart-breaking anxiety, "Are my children or is my daughter doomed to suffer as I now do?" The answer, given in no equivocal words, is, The probability of such a doom for any descendant of yours is extremely small. In all the statistics which I have been able to collect, where the antecedent family history seemed to be trustworthy, I have found the proportion of those who have had cancer, in whom some relative of a former generation is reported to have had some form of malignant disease, to be only 13·65 per cent. On the other hand, in regard to one family which has in the present generation the largest number of victims I have ever personally known, I have authoritative proof for asserting that no development of any form of malignant disease has ever existed in three previous generations, including collateral branches.

Before a professional audience I could give a list of names, which would be regarded as conclusive as to present belief of the profession on this point. More than a quarter of a century ago, Mr. Jonathan Hutchinson, whose opinions carry the greatest weight, expressed his disbelief in hereditary origin as an effective cause. Recently—that is, during the past year—in a notable and most able discussion of this subject, he said: "It is utterly useless to employ such a term as hereditary transmission of cancer in such a sense as we speak of the transmission of some other diseases." A proclivity to disease may result from the conjunction of certain parentage, but it can not be said to be inherited from ancestors in whom it did not exist. We may speak of cancer being hereditary as we speak of delirium tremens as hereditary, but in neither case is this transmission of the disease. Parents can not transmit to children disease which has no existence in their own system previous to the birth of the children, and then it is absurd to say that a daughter has inherited the disease which her mother first developed twenty-five years after the birth of the daughter.

A cancer bacillus is as yet unknown in science, and the most recent investigations have failed to find any. But I observe that Sir James Paget, in a lecture delivered on the 11th of November, expressess the belief that micro-parasites, or substances produced by them, will some day be found in essential relation with cancer and cancerous diseases. But as yet there are no ascertained facts which support this belief. In a paper read before the Academy of Medicine in 1870, I then avowed the opinion that cancer could not be regarded as a hereditary disease, but that a hereditary tendency to it often exists in those whose ancestry has been wholly exempt from it. In such it is probably developed by some local existing causes.

Cancer was regarded by Abernethy, a great authority in pathology and surgery during the early part of the present century, as being simply the local manifestations of a constitutional disease. Within the past few years a large number of the most eminent pathologists have become adherents to the doctrine that it is primarily a local disease, and that the constitutional affection is a secondary result. This is not the time or place to review the various able arguments which have been urged in favor of one or the other view, but it is a point of great importance, as affecting the question of the curability of the disease. In the first place, no medicine has yet been discovered which acts specifically in retarding or curing the disease, as quinine and mercury and other medicines do certain specific diseases. No man has the moral right to administer any drug without some well-defined view of the end which he wishes to accomplish, and a well-grounded belief that the drug he selects will probably effect this result. But in cancer we do not know what primary changes are necessary, in either tissue or function, to prolong life or cure the disease. Even if we did know this, no drug has yet been found which experience has proved will effect these changes. So it may be positively asserted that no case of cancer has ever been proved to have been cured by medical treatment, and, as after three years it is generally believed that the probability of recurrence is very slight, we have the right to say that many cases have been absolutely cured by total removal of the diseased tissues.

I think sufficient facts have been accumulated, especially within the past ten years, to justify the following assertions. Total removal of the whole diseased growth when it is found as a distinctly limited affection, the lymphatic glands not being involved, it is highly probable will be followed by a cure.

If the disease has involved the lymphatic vessels and glands, the chances of cure are materially diminished, but in many such cases an operation has proved to be of great service in relieving suffering and prolonging life for months, and in some cases from one to two or three years.

After the local disease has existed a sufficient length of time to contaminate the blood and infect the general system, a cure by an operation or by any other method is absolutely hopeless. Great progress has been made in successful surgery within the past few years by a resort to the operation at the earliest possible period—that is, so soon as the existence of the disease can be determined. The most recent and probably the most authoritative writer on this subject, Mr. Butlin, of London, asserts that every week of delay increases the danger of the contraction of various adhesions, of affection of the secondary glands, and of the formation of secondary growths. But duration alone is not a conclusive argument against the success of an operation, for, as the same author adds, "when long duration of a malignant tumor is associated with a very slow progress, small size, absence of serious adhesions, absence of affection of the neighbouring lymphatic glands and of secondary growths, so much the more favorable is the prospect of permanent relief from operation for its removal." The question of the locality of the growth is one of great importatnce in forming a decision as to the necessity and probable success of removal, and will always be carefully and conscientiously weighed before a decision is made. These malignant growths may appear in any tissue of the body, external or internal, and eminent surgeons of this city, as elsewhere, have removed them, with all the success anticipated, from muscles, bones, lymphatic glands, the eye, the face, the lower lip, the tongue, the breast, and other external organs.

If this were a fitting opportunity and time would permit, I am sure all present would be interested in hearing an account of such as I have personal knowledge of, either from my own observation or from a knowledge derived directly from the operations. But such details would be inappropriate on the present occasion, and I am compelled to deny myself the pleasure of paying a jnst tribute to the skill and sound judgment of surgeons that we have in our city.

Dr. S. W. Gross, of Philadelphia, asserts: "The convictions are steadily gaining ground that this disease in the breast is primarily a local affection and not a constitutional one, and that these views are supported by many of the most eminent men living; pathologists such as Virchow, of Berlin; Billroth, of Vienna; Fersche,of Breslau; Esmarch, of Kiel; Nussbaum, of Munich; Volkmann, of Halle; Erichsen, Hutchinson, Gull, Simon, Bryant, Green, and others, of London, and the late Dr. Goss and Dr. Parker, Dr. Peters, Dr. Moore, Dr. Richardson, and others, in the United States, have shown by the statistics of their own practice and that of others the usefulness and success of the surgical removal of the disease. But, as I have before said, removal of the disease by operation is not restricted to external organs, but many operations for removal of internal organs have been performed with all the success that could be anticipated, although, it must be added, there have been many failures. On November 14th, three weeks ago, I was present when one of the medical board of this hospital performed one of the most difficult operations ever attempted in surgery—viz: the entire removal of a most important internal organ. I had previously seen the patient, and concurred in the opinion that the operation was imperatively necessary, and that it offered a fair promise of success; I may add that the opinion of the operator and myself was given independently, each without the knowledge of the other. This patient, as I have learned within a few days, has had no unfavorable symptoms which have retarded her convalescence. It is possible that she may hereafter escape any return of the disease. It is certain that her life has been prolonged, and that she has been saved from months or perhaps years of suffering, which would have soon ended her days. A fair number of cases have been reported in which such results have been attained. And yet so late as fifteen years ago any proposal to attempt such an operation would have been condemned by the universal sentiment of the profession; and if it had been attempted and resulted in failure, the public would have denounced the operator as a reckless, unscrupulous butcher, who had no conscience as regards the result to his patient, but simply sought personal glory in the *éclat* of having performed a wonderful operation. All of us have before heard such language applied to surgeons.

The case which now commands the most universal sympathy and interest in all nations of the world, is that of the Crown Prince of Prussia. It is an unparalleled event in history that three men, two of whom had been at the head of the government of their respective nations, and the third whose probable inheritance was an empire, should each have been victims to malignant disease, in contiguous localities differing only in some minor details, at the same period in the world's history. In the case of President Grant, the locality of the malignant growth was such that it was decided by most competent authority that from the beginning a successful removal by surgery was not practicable, as the danger from such an attempt would be much greater than the probability of any benefit. During the illness of General Grant I received a letter from the brother-in-law of Dom Ferdinand, ex-King of Portugal, and his attending sur-

geon, detailing the history and description of the case of the ex-King, in whom malignant disease had also appeared in the mouth, very near to but not exactly in the same site. From the description given, the conviction was irresistible to my mind that it would be impossible by any surgical procedure to remove the whole of the diseased tissue, and that any attempt of the kind would be attended with such danger as might be followed by immediate death and would undoubtedly shorten the duration of his life. His death followed within a few months that of our honored ex-president. As regards the probable future of the case of the Crown Prince, none but those able men who are in attendance upon him, and who must have a knowledge of many details which are essential elements, but which it is impossible to explain to the world, are competent to form or express any opinion of value. In general terms, I may say that his general health is reported to be very good —that the progress of the disease appears to be slow as compared with some cases, and I may add, if it be decided by his medical advisers that partial or entire excision of the larynx should be performed, we have abundant evidence that in a certain number of cases both of these operations have prolonged life to a period when the probability of recurrence is very small. In some cases entire excision has saved life for a length of time; that gives great encouragement for hoping that the ravages of this terrible disease have been arrested. Two such happy results have been reported in this country and several abroad. Dr. Roswell Park, of Buffalo, in June, 1885, removed the entire larynx on acconnt of the existence of this disease in a patient who was himself a medical man. In a letter, dated November 22nd, he writes to me: "The Dr. has a number of relatives in Buffalo, and, as I frequently see one or more of them, I am kept pretty well informed as to his condition. My latest news is so recent as last week, and to the effect that he is as well as ever."

It must be obvious that all new and important operations are followed by a progressive success in their results as the methods of operating are improved in their details and as the after-treatment necessary becomes better known. The percentage of successful results increases in a ratio in proportion to the experience acquired by the increasing number of the operations. Indeed, I may add that it is my conviction that the progressive number of cures of this terrible curse to humanity is in a more rapid ratio than the progressive increase of the frequency of the disease.

Need I say more in the light of the past to point out what may be hoped for in the future from such a hospital as this, under the devoted zeal of the active staff, whose ability, competency and faithfulness to their duty have already been demonstrated in other positions? Can any one have a doubt as to the probable service to humanity which will result from the careful observation and study by such competent men of details that can never be acquired except in a large hospital?

I question whether any, even the most sanguine, has more than a feeble conception of the benefit to the victims of the disease to be here treated, and to thousands of others, that will result from the opening of this hospital.—*New York Med. Jour.*

THE PSYCHOLOGY OF JOKING.

I think punning does not receive enough attention. In spite of Dr. Johnson's well-known dictum, we should not despise punning. Sydney Smith says that it is the foundation of all wit. Supposing three degrees of evolution, I submit that (1) punning is the least evolved system of joking, that (2) wit is evolved out of punning, and that (3) humor is evolved out of wit. Everybody has heard of Sydney Smith's remark—that it requires a surgical operation to get a joke into the head of a Scotchman. But he spoke without distinguishing. The Scotch have a great appreciation of those highly evolved jocosities displaying the humorous, although, no doubt, a scorn of simple, lowly evolved jocosities, such as plays on words. Is is difficult to form a conception of a Scotch punster; yet I have heard an Aberdonian, a physician of world-wide reputation, make a pun.

Punning is well worthy of the Psychologist's attention. I seriously mean that the analysis of puns is a simple way of beginning the methodical analysis of the process of normal and abnormal Mentation. This, I think, I can easily show.

Vision is stereoscopic; in a sense it is slightly diplopic, for there are two dissimilar images, although there seems to be but one external object, as we call it. To borrow the ophthalmological term. we can say that Mentation is "stereoscopic;" always subject-object, although, we often speak of it as single ("states of consciousness," etc). Just as there is visual diplopia so there is "mental diplopia," or, as it is commonly called, "double consciousness."

Now I come back to punning. We all have "mental diplopia," when hearing the answer to a riddle which depends on a pun—"When is a little girl not a little girl?" Answer: "When she is a little horse (hoarse)." The feeble amusement we have in the slightly morbid mental state thus induced is from the incongruous elements of a "mental diplopia." The word "hoarse" rouses in us the idea of a little girl who has taken cold, and the same sounding word "horse" rouses in us the idea of a well-known quadruped at the same time. We have the sensation of complete resemblance with the sense of vast difference. Here is, I submit, a caricature of the normal process of all mentation. The process of all thought is

"stereoscopic" or "diplopic," being the tracing of relations of resemblance and difference.

To call punning a slightly morbid mental state may be taken as a small joke. But I do not think it very extravagant to describe it so; it certainly is not if it be a caricature of normal mentation. A miser has been defined as an amateur pauper; the habitual drunkard is certainly an amateur lunatic. And in the same style of speaking we may say that—well, we will say that punning is playing at being foolish; it is only morbid in that slender sense.

The word "play," carries us on in a slightly different direction. Jocosities of all degrees of evolution (1) puns; (2) witticisms; and (3) humorous statements are the "play of mind,"—play in the sense in which the word has been used in the remark that the "æsthetic sentiments originate from the play impulse." A further definition of play, as thus used, is given in the following quotation from Spencer:—"The activities we call play are united with æsthetic activities, by the trait that neither subserve, in any direct way, the processes conducive to life" (*Prin. Psych.*, vol. ii, p. 627). There would be a great intellectual advance—due, I presume, to Internal Evolution—when man began to value things for their beauty apart from their use: one sign of his having "got above" his mere animal self. For it showed that over and above mind required for mere animal existence, he had some surplus mind for greater ends of life. So I contend that our race owes some respect to the first Punster. For the dawn of a sense of the merely ridiculous, as in punning and simplest jokes, shows the same thing as the dawn of æsthetic feeling—surplus mind, something over and above that required for getting food and for mere animal indulgence. All the more so if punning be that out of which wit and humor are evolved.

It is not a good sign if a man be deficient in humour, unless he have compensation, as Wordsworth had, in a sense of the sublime, or in great artistic feeling, or in metaphysical subtlety. The man who has no sense of humour, who takes things to be literally as distinct as they superficially appear, does not see fundamental similarities in the midst of great superficial differences, overlooks the transitions between great contrasts. I do not mean because he has no sense of humour, but because he has not the surplus intellect which sense of humour implies. Humour, being the "play" of mind, is tracing deep, fanciful resemblances in things known to be very different. This is "playing" at generalisation, and is only a caricature of the same kind of process which made Goethe declare that a skull is a modified part of a vertebral column.

Now I am about—not really digressing from what I have just said—to say something which sounds very paradoxical: that persons who are deficient in appreciation of jocosities in their degrees of evolution are, in corresponding degrees, deficiently realistic in their scientific conceptions. One would infer this *a priori*. Every child knows that a man born blind has no idea of light, but the educated adult knows, too, that the congenitally blind have no notion of darkness. And I think that observation confirms what *a priori* seems likely—that *pari passu* with the evolution of the sentiment of jocosity (playing at unreality) is the evolution of power of realistic scientific conception—from sense of the merely ridiculous with parallel realistic conception of simple things up to sense of humour, with parallel realistic conception of complex things. But we must be on our guard not to take commonplace realism about simple things to be realism when applied to very complex things. It seems at first glance more realistic to snppose that sourness is inherent in vinegar than that it is always a sensation in some percipient. But that the former hypothesis is very unrealistic is easily seen when we put such crude metaphysics in other words: the doctrine then is that part of the taster's own mind is outside himself. It is possible for the same person to be truly realistic in simple things, and to be intensely unrealistic in complex things. Thus, the really practical man who may tell us that he despises metaphysics, may be crudely metaphysical when he deals with complex things—"explaining," for example, that a man comatose does not move because he has lost consciousness. Surely the truly realistic conception is that the comatose patient does not move any of his limbs from some physical disability, for essentially the same reason that a hemiplegic man does not move his arm and leg.

I now go back to my small joke that punning is a slightly morbid mental state, a "mental diplopia," a caricature of the normal "diplopia" of healthy mentation. From this point I make the assertion that the "physiological insanity" of dreaming is diplopic—a caricature of that of waking mentation. A physician read in the day of the strained relations of European States; in his dream at night he is called in consultation by Bismarck, and advises a course of the iodide of potassium (directions for the application of the remedy were not given). Clearly, there are here two very dissimilar mental states "pretending" to be stereoscopic; manifestly a seeming fusion of ideas of prescribing for a patient with ideas of the hostile attitude of European States. I hope some time to be able to show that such diplopia has the same kind of mechanism as that of the pun—that the two elaborate dissimilar states are held together by two sane, or similar, simple mental states. I go on to remark that in some people there are beliefs as incongruously diplopic as some states in dreams; diplopic in that way to other people, at any rate.

1. Killing a rabid dog to prevent people already bitten by it going mad. 2. Imagining it to be possible to study what are called "diseases of the mind" methodically, without distinguishing between the physical and the psychical. 3. A cleanly mother, from maternal solicitude, refraining from washing the top of her baby's head, lest it should come to have "water on the brain." 4. Imagining it to be possible to investigate complex subjects without the use of hypotheses; for instance, that Harvey could have made observations and experiments to *prove* the circulation of the blood, without *supposing* before hand that it did circulate. 5. Anointing a blade with healing salve to cure a wound inflicted by the blade.

Once more I go back to punning for a new start, trying to show again by very simple cases that punning is only a caricature of, and therefore, for the psychologist, a valuable experiment on, the process of normal mentation. I take first a case, which is almost, if not quite, a pun, but one made unwittingly. What is called the inelegance of using the same word in one sentence, or in two consecutive sentences, causes mental diplopia. For even if each of the two words has the same dictionary meaning, we must bear in mind that a word loses something of that kind of meaning when forming part of a proposition, losing and taking meaning from its context. Hence, the second time the word comes, there is a faint revival of the ideas it symbolised when used the first time; along with a vivid revival of other ideas it now symbolises; there is a trivial confusion from slight mental diplopia, like that from an ill-understood pun. I now give a more striking example, one in which there is manifest diplopia without confusion.

A smell, say, of roses, I now have makes me think of a room where I passed much of my time when a child. Here clearly is "mental diplopia," and the mechanism of it is quite similar to that of the pun, making allowance for caricature in the latter. For the true process is that the smell of roses, now having, develops what we call the same smell, but really another smell, that of roses once had in the old room. The two scents, linked together, hold together two dissimilar mental states (1) present, now narrowed, surroundings, and (2) certain vague quasi-former surroundings. When the scent of hay or the caw of rooks rouses in us vague pleasurable feelings, the mechanism is of the same kind, but the process is more complex. To further insist on the fact that mentation is stereoscopic, with more or less manifest diplopia, I give an example of mentation which is exceedingly common. Whilst writing I suddenly think of York Minster. Here is mental diplopia—(1) narrowed consciousness of my present surroundings and (2) cropping-up of consciousness of some quasi-former surroundings. Of course something, whether I can mentally seize it or not, in my present surroundings, has developed a similar something associated with York surroundings.

Recapitulating, I say that the process of all thought is double, in degrees from a stereoscopic unity of subject and object to manifest diplopia (two objective states for one subject). The process of all thought is tracing relations of resemblance and difference, from simplest perception—to say what a thing is, is to say what it resembles and differs from—up to most complex abstract reasoning. The formula of the caricature of the normal process of thought is the "pretence" of some resemblance between things vastly different—from punning, where the pretended resemblances and real differences are of a simple order, up to humour, where both are highly compound. We have the "play" of mind in three degrees of evolution, three stages of increasingly complex incongruousness.

If I had time I could, I think, show that this address on jokes is not itself, merely one big poor joke, but that what has been said applies closely to the study of "mental symptoms" in serious diseases. I should begin the new stage of the inquiry with the quasi-healthy feeling of "reminiscence," clearly an element in a mental diplopia. For my task would be an endeavor to show that all morbid mental states are departures from normal mental states in particular ways—that, for example, the process of mentation in the maniac is but a caricature of that in healthy people. Thus the reminiscence, although it is almost pedantic to call it morbid, is really a link between perfectly normal and decidedly abnormal mentation. For reminiscence occurs in slight attacks of a certain variety of epilepsy. as do other voluminous mental states ("intellectual auræ)," I call them all "dreamy states." These cases I should take next. There is clearly in them morbid mental diplopia, and yet this is traceably only a gross caricature of normal mental diplopia, being linked on to it by the reminiscence occurring in people we call healthy. And I think it could be shown that they have the same kind of mechanism as puns have. Next, taking these miniature and transient cases of insanity, and other cases commonly called insanity, I should try to show that the comparison of mentation with vision is of direct value.

In the symptomatology of a patient who has paralysis of an ocular muscle, there are many elements. There is morbid visual diplopia; in insanity there is morbid mental diplopia. The ophthalmologists "true," and "false" images have their analogues in the "true" and "false" mental states in the cases of epilepsy mentioned. In the former, when the divergence of the eyes is slight, there is more visual confusion; in the latter, when the dissolution of the highest centres is

shallow, there it more mental confusion. In the former, when the divergence is great, diplopia ceases (the patient, the opthalmologist says, "neglects" the false image): in cases of epilepsy, upon deeper dissolution than that with which there is the "dreamy state," the actions are considerably coherent. The "erroneous projections" of the former have their clear analogues in the hallucinations of many cases of insanity.

Believing that all diseases are to be looked on as flaws in different parts of one Evolutionary system, I urge the "Comparative study of Diseases of the Nervous System." I submit that, recognising the enormous difference between insanity and ocular paralysis, a profitable comparison and contrast may, nevertheless, be made, which will further a better knowledge of both. I do not mean simply that ocular paralysis may be taken as an illustration, to simplify explanation of a case of insanity, but also that, both being examples of Dissolution, the very same principles are displayed in each.—Dr. Hughlings Jackson, in the *Lancet*.

THE THERAPEUTICS OF THE URIC ACID DIATHESIS.

The treatment of the uric acid diathesis was made the subject of discussion before the Section of Pharmacology and Therapeutics at the Dublin meeting of the British Medical Association. The subject was introduced by Dr. Burney Yeo in an address which commanded the attention of a large auditory for nearly an hour (*Lancet*). He said he would endeavor to confine himself to the practicable aspects of the question. The pathology of the condition in which uric acid was present in excess in the organism was still doubtful. Murchison regarded the liver as primarily at fault, and with this view Professor Latham was disposed to concur. According to this theory, the essential condition present was the non metabolism of glycosin into urea. Garrod, on the other hand, regarded the kidney as the active producer of uric acid. Ebstein placed its production in the muscles and marrow of bones. Frerichs held that the essential point was the perverted metabolism of albuminoid substances into urea. Bouchard denied that the presence of uric acid in excess was the chief feature in the morbid condition in question. One thing appeared certain,—that the uric acid diathesis had its foundation in the imperfect metabolism of food, especially albuminoids. He (Dr. Yeo) would define it as "mainly a disturbed retrograde metamorphosis." Turning to therapeutics, he would point out that in all therapeutic questions three things had to be taken into account: 1, the pathogenic factor; 2, the constitutional factor; 3, the remedial factor. The two former were highly variable, and only the last had any claim to constancy. He would deal with the various remedies in detail. 1. Diet, regimen, and mode of life. There could be no doubt that, next to heredity, errors in eating and drinking were the most potent causes of the uric acid diathesis; but it was an error to assume that all gouty people had been intemperate. Ebstein regarded a tendency to obesity as a potent factor in the production of the condition, and advocated a dietary to check fat formation. He did not, however, entirely exclude fatty matters from the dietary. He allowed cabbage, peas, etc., but no turnips. He (Dr. Yeo) thought that no good results followed from prohibiting the moderate use of animal food. Senator advises a minimum of fats, and especially prohibits the yelk of egg. As regards alcohol, he thought it would be better for some persons, especially women, to abstain altogether; in others a moderate use of alcohol was not objectionable. Malt liquors and bad wines were to be carefully avoided. He regarded the cheap clarets in common use as particularly injurious. He held strongly that the *quality* rather than the *kind* of wine was the really important point. As a general rule, those wines were best which had a diuretic action. A small quantity of alkaline water might be advantageously added to the wine. Still Moselle was good, and was now much used. Exercise in moderation was important as tending to improve the general health, but it must be borne in mind that gout was very common in those who took a great deal of exercise, and that women, who led comparatively inactive lives, suffered far less than men. A warm, dry, equable climate was useful. All climatic conditions which interfered with the action of the skin were hurtful. He advised the regular use of considerable quantities of water, preferably hot water. Turning to drugs, colchicum had been much assailed of late years, but he had never observed the ill effects which some authorities attributed to its use. Garrod, Sir Thomas Watson, and Graves had all borne witness to its value. He believed that its chief action was upon the liver. It had also sometimes a diuretic and diaphoretic action.

As regarded the salicylates, he could not agree with Germain Sée that salicylate of sodium was the best remedy which we possessed. The benzoates had been highly recommended, but he was not convinced of their utility. Guaiacum, in spite of the high commendation of Garrod, seemed to be generally neglected. Iodide of potassium was very useful. Alkalies were in almost universal favor, but Dr. Latham did not think highly of them. There was a disposition at present to exalt unduly the merits of lithium, in comparison with sodium and potassium. He thought bicarbonate of potassium was the most certain diuretic of the group. Magnesia and lime had been largely lost sight of, but the success attending the administration of the waters

of Contrexéville (which contained large quantities of these salts) should direct our attention to them. He thought Bath was likely to be as useful as Contrexéville, and it was a much more attractive place. The mineral constituents of waters at these two resorts were similar.—*Therap. Gaz.*

LAPAROTOMY FOR TUBERCULAR PERITONITIS.

A most interesting discussion on the treatment of this affection took place at a meeting of the Clinical Society of London, October 28th, with papers by Mr. Barwell and others. The *crux medicorum*, which has long been given over by medicine, seems to have been taken up enthusiastically by the broad shoulders of surgery. The *Medical Press*, commenting on the discussion, says:

"The number of cases on record in which laparotomy has been performed for the relief of tubercular peritonitis is now sufficiently large to enable us to form some opinion as to its propriety and as to its effects. Mr. Treves quoted thirty-six cases, in only six of which recovery did not take place, and this alone would suffice to warrant further trials when we consider the intractable nature and fatal tendency of the malady. A series of ninety-six cases brought before the Congress of German Surgeons yields almost, if not quite, as favorable statistics. In view of these successes, it may almost be laid down as a rule of treatment that, whenever we detect symptoms of tubercular peritonitis, the proper course is to open the abdomen and cleanse the peritoneum. The extraordinary impunity with which the peritoneal cavity can be manipulated under these circumstances is not the least interesting feature of the operation. The fact has long been recognized that, when the membrane has been the seat of chronic inflammatory changes, it is less apt to resent interference than under normal conditions, and advantage is taken of this to subject it to treatment which would have inspired surgeons of but a few years since with unmitigated horror.'

Evidence was presented in the discussion that concomitant tuberculosis of the lungs is often favorably influenced by the amelioration of the abdominal disease. The accuracy of the diagnosis in some of the cases of most marked benefit from surgical treatment was confirmed by microscopical examination of the granulations with which the peritoneum was covered.

In several of the cases alluded to, the ascites had been first treated by aspiration, which, though it relieved the mechanical distress, did not have the effect of the more daring operation which was subsequently performed. Most operators attach great importance to the use of the drainage-tube, which is generally brought out through the abdominal wound, but Mr. Barwell did not employ it in the case which he brought before the Society, and objected to it as unnecessary, and even useless, seeing that a tube from the front could not be reasonably expected to drain the abdominal cavity of a patient lying on the back. In any case, he maintained that it was preferable to give the patient a chance of doing without it for the first twenty-four hours, even if it had subsequently to be inserted. Although Mr. Treves was firm in his advocacy of the use of the tube, which he considered a principle of the treatment, one of his cases tended to prove the contrary, for, although the tube was inserted, subsequent accumulation took place, in spite of all the efforts made to obtain a free discharge. It is not without interest to note that in this particular case, the patient being a child, Mr. Treves went a step further, and injected a solution of iodine, again not only with no untoward result, but with positive advantage to the patient, whose temperature then and there fell to normal, and never after rose.—*Boston Med. and Surg. Jour.*

IRON AND SODIUM SALICYLATE IN RHEUMATISM AND RHEUMATIC AFFECTIONS.

For some four years I have been in the habit, in certain classes of rheumatic affections, usually chronic, of employing a combination of tincture of chloride of iron and sodium salicylate, prepared according to the following formula, which I have been informed by Dr. Rice, of Bellevue Hospital, New York, and other experienced pharmacists, is the first successful combination of these drugs in an eligible preparation. In the House Pharmacopeias of the Philadelphia Polyclinic, where it was first used in 1883, and of Jefferson Medical College Hospital, it is known as the Mistura Ferro-salicylata:

R. Sodii salicylatis,	℥ iv.
Glycerini,	f ℥ ij.
Ol. gaultherii,	♏ xx.
Tinct. ferri chloridi,	f ℥ iv.
Acidi citrici,	gr. x.
Liq. ammonii citrat. (B.P.), q. s. ad	f ℥ iv. M.

The mixture is clear, and is not unpalatable. The usual dose is two fluidrachms in water, three or four times a day. The quantities and proportions of the active ingredients may, of course be varied according to the intended frequency of dosage and other circumstances. In cases which are rather subacute than chronic, it is sometimes given every second hour, until the physiological effects of the salicylate are produced, and then at longer intervals. I have also employed it, with apparently good results, in acute articular rheumatism, and in some cases of acute tonsilitis, especially in that group where the diagnosis is at

first in doubt between rheumatic angina and diphtheria. Some of my friends have reported to me good results in acute rheumatism. Its particular applicability is in that group of patients in whom Dr. Russell Reynolds strongly urges the iron treatment—a recommendation endorsed with equal earnestness by Bartholow—namely, anemic, delicate, poorly-nourished or broken-down individuals, usually old people, children or adolescents, but met with at all ages, whether the disease be acute, subacute or chronic. In adults, indeed, as a rule, and quite frequently in children, even when the disease is not plainly chronic, the patient will give a history of repeated acute attacks; or there will seem to have been a long series of recurrences, with intermissions of doubtful health. Recognizing the weight of the testimony in favor of tonic, and especially ferric, treatment of such cases, and yet desiring to obtain also the specific action of the salicylic compounds, I succeeded, after several ineffectual trials, in obtaining a clear mixture by the use of the formula given above, and four years' experience, latterly with the ample material furnished by the out-patient department of Jefferson Medical College Hospital, has abundantly confirmed my expectations of its usefulness.—Solomon Solis-Cohen, M.D., in *Med. and Surg. Reporter.*

SOME POINTS IN THE CARE OF CHILDREN.

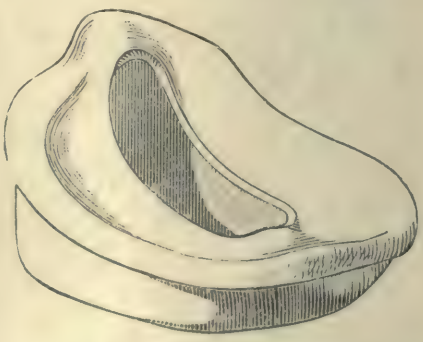
A writer in the St. Louis *Globe-Democrat*, evidently a discreet medical man, says some things so true and so important for physicians to appreciate, that we think it well to repeat certain of them for the benefit of our readers. In the first place, he dwells upon the value of putting children early to bed, and having them rise soon after they wake. He holds that it is not only cruel, but also mischievous, to compel children to lie awake in bed for hours to prevent them from disturbing older people, The morning sun is most essential to plant life. It is equally true that the morning sun is most valuable for animal vigor, and this includes human beings.

Again, this writer opposes study late in the afternoon, and much more in the evening, for young children; and emphasizes, by a striking illustration, the advantages of play for children, instead of straining their little brains. He also expresses what we regard as a wise disapproval of putting children to bed immediately after supper. Let them, he says, have a chance for light exercise and sport. Above all he depreciates the stormy season which often follows supper, when the parents wish a child to go to bed and the child does not want to. We appreciate, of course, the advantages of discipline and regular habits; but we agree with the writer referred to in deprecating the practice of forcing a child te bed immediately after the last meal of the day.

One more point which we would refer to in this interesting article is that each child should, if possible, have a bed to itself. For physical and moral reasons we believe this to be desirable; and we share the writer's convictions that the habit of sleeping alone is one which is advantageous to adults also. As those who have great opportunities for moulding the future of the children committed to their care, our readers will estimate at their proper worth the homely truths which we have just cited; and no good physician, we are sure, will consider it beneath the dignity of his calling to study matters which are so important to the happiness and welfare of the "little ones."—*Med. and Surg. Reporter.*

A NEW BED PAN.

We notice with some satisfaction an attempt to break away from routine in the matter of bed pans, and to devise something more in accordance with comfort, convenience, and common sense. Such an effort has been succeeded by the production of what is known as the "Anatomical Bed-Pan," by Mr. C. F. Forshaw, a dentist, of Brad-



ford, who would appear to have discarded for the nonce the upper molars for their resultants at the other end. It is modelled from the human nates, etc., and is very comfortable and easy of use. It is applicable to both sexes, and as the cover is movable, it admits of being thoroughly cleansed. We can strongly recommend it as a noteworthy improvement on the shapes hitherto supplied.—*Med. Press and Circular.*

POISONING BY ANTISEPTIC SOLUTIONS OF BICHLORIDE OF MERCURY.—Mr. J. A. Pepper calls attention (*Lancet*) to the source of danger to life from the use of bichoride of mercury in the form of very weak solutions—*e.g.*, one in 1,500 or 2,000. I understand, he says, that in midwifery practice it is not at all uncommon to employ injections of the strength just mentioned for cleansing purposes,

not only as a corrective against septic discharges, but also as a prophylactic. Where the patient is free from organic disease of the kidneys, one has little need to fear untoward consequences from the treatment under consideration. I am aware of two cases of death from acute inflammation of the bowels following closely on the injection of very weak mercurial solutions into the vagina shortly after parturition. As in each instance no other cause of the fatal complication could be discovered, there is little doubt that the acute irritative lesions in the intestines were due to the bichloride in the course of its elimination. The action of the salt was concentrated, so to speak, in this particular region by reason of grave renal affection. In one of the two cases I made a very exhaustive post-mortem examination. The whole of the small and large intestine was acutely inflamed. There were thousands of hemorrhagic patches, punctate and irregular in shape. There were a few minute recent ulcers. The catarrhal congestion was extreme. Lymph was effused into the substance and upon the surface of the mucous membrane. Slight general peritonitis seemed to have started at the middle of the colon, where the intestinal lesion was more marked than elsewhere. The stomach was not affected. The kidneys were in an advanced state of fatty degeneration. No aperients had been administered to the patient, but a solution of bichloride of mercury (1 in 2,000) had been injected into the vagina to prevent decomposition of the lochia. Profuse diarrhea ensued, and continued until death. The body temperature was never raised, and latterly it was subnormal. I was at a loss to account for the ultimate cause of the diarrhea and its fatal consequences, until the circumstances were explained to me by an obstetric physician who was present at the necropsy, and who had witnessed a precisely similar case in his own practice. The lesion to be learnt from the foregoing narrative is—that even a very attenuated solution of a mercurial salt should not be employed as a vaginal injection without first ascertaining the state of the kidneys by an examination of the urine.—*Med. News.*

Cause and Cure of a Certain Form of Backache.—Early in the year 1881, in a note which was published in a weekly professional journal, I asked the attention of my brethren to a form of backache which had not so far as I know, been described before. I desire now to refer to this subject again and to record that my further experience in practice has confirmed my previous remarks upon the point in question.

Subjective symptoms are always important diagnostic signs, and they are often clear therapeutic indications. Among such sensations backache is frequently a leading symptom, and also one which is pressingly dwelt upon by patients. Of backache there are divers forms. Dr. George Johnson, in an able clinical lecture, and Mr. William Squire, in a practical memorandum, have drawn the attention of the profession to many of these. But they have not mentioned a variety of backache in which the cause of the pain is traceable to the condition of the large bowel. I find that some patients complain of a pain, aching, dull and heavy in character, and extending "right across the back." When asked to point out its position, they indicate this by carrying a hand behind the trunk and drawing the extended thumb straight across the back, in a transverse line about half way between the inferior angels of the scapula and the renal region. This pain I venture to attribute to a loaded colon: I conclude I have correctly found its proximate cause in fecal accumulation in the large intestine. I have found it disappear after the exhibition of an efficient cathartic. This form of backache is a concomitant of habitual constipation, and is especially significant of the alvine sluggishness of sedentary persons. In such a condition as I have stated elsewhere, I find aloes, given in combination with iron, to yield the best results. We owe the valuable suggestion of combining iron with aloes, when aloes is given for laxative purposes, to the late Sir Robert Christinson. He showed that the cathartic property of aloes is much increased by its combination with sulphate of iron. Dr. Neligan, Dr. Kent Spender and Dr. David Bell have confirmed this experience. I prefer Socotrine aloes, and I give of it one, two or three grains in a pill, combined with a quarter of a grain of sulphate of iron and one grain of extract of hyoscyamus. This pill should be taken every night. We must aim at producing a full alvine evacuation after breakfast. When a saline cathartic is indicated, I usually employ the old-fashioned Rochelle salt. This "goes" well with tea, coffee or cocoa. One or two tablespoonfuls may be taken at breakfast, dissolved in a large cupful of one of these beverages.—Sir James Sawyer, in *Lancet.*

The Treatment of Facial Neuralgia by Antipyrine.—One by one the non-inflammatory painful affections are wheeling into line as amenable to treatment by antipyrine. Germain Sée, in speaking of this subject, says: "To complete the series of painful affections of the head which have yielded to antipyrine, I must mention facial neuralgia. I have notes of seven cases of tic douloureux, all of a very grave kind, two of which were completely cured. One resisted antipyrine absolutely, while four have experienced marked amelioration and appear to be in the way to recovery. These patients had been suffering from tic douloureux from twelve to eighteen years During this long and frightful period of suffering, these patients had never been able, without pain,

to open their mouths, to speak, to chew their food, to swallow hot or cold liquids, to expose themselves to a current of air, or to enjoy the least respite, even under the influence of morphia or salicylate of soda. These four patients are enabled now, after two months of treatment, to enjoy that freedom from pain which they had not before known for years, and to live like the other members of the family. The treatment has consisted in the daily use of 75 grains of antipyrine (15 grains every four hours, till the entire quantity was taken). I have also relied very much on the subcutaneous injections of antipyrine—8 grains dissolved in the same weight of water, and the whole injected for one dose—but as these injections have sometimes been painful, I have lately modified my formula, as follows: I now dissolve my 8 grains of antipyrine in 22 grains of water, to which, in order to enhance the effect, I sometimes add $\frac{1}{8}$ grain of cocaine. These injections act with surprising rapidity and energy. I now rely on these hypodermic injections in all the inveterate cases, and during the painful paroxysms combine the hypodermic treatment with the internal administration of 75 grains a day. The results in this most grave and most intractable of painful disorders have been unprecedently gratifying and surprising."—*Medical Record.*

COLD WATER ENEMATA IN CATARRHAL JAUNDICE.—Ten years ago Krull recommended a method of treating catarrhal jaundice which had at any rate the merit of simplicity; it was to give daily large rectal injections of cold water. The water on the first day was to have a temperature of 59° F.: on the following days the temperature was gradually raised to about 72° F. Loewenthral and Eichorst have lately reported very good results from this treatment, and E. Kraus has found it equally successful in children, the quantity used in their case being as much as one litre ($1\frac{3}{4}$ pint). Dr. A. Chauffard, in a recent number of the *Revue de Médicine*, reports very favorably of the method. He states that the large injections are well borne, and are generally retained for five or ten minutes; they produce only slight colicky pain, and after the stool has been passed the patient feels considerably relieved. Improvement begins almost at once; pruritus and yellow vision disappear with great rapidity; the fæces resume their natural color, and the bile pigments disappear from the urine in from two to eight days. The mode or action of this method of treatment is not very clearly made out, but it seems to be proved that one effect is to cause forcible contractions of the gall bladder. The bile is secreted under very low pressure, and as the experiments with toluylendiamine have shown, deep jaundice may be produced if the bile becomes concentrated and thicker than usual. It is quite possible, therefore, that active contraction of the gall bladder might overcome the slight obstacle at the aperture of the ductus choledochus; such an effect would be doubtless favoured by increased peristalsis of the duodenum.—*Br. Med. Jr.*

THE ETIOLOGY OF PHTHISIS.—In an interesting article on the etiology of phthisis *(Philadelphia Med. Times)*, Dr. R. W. Philip, of Edinburgh, Scotland, reaches the following conclusions:

1. In view of the work of Koch, it is impossible to avoid admitting that a casual relationship exists between the tubercle bacillus and the phthisical process. 2. The mere predication of this relationship is not sufficient in explanation of the clinical facts and the generally fatal termination of such cases. 3. The usually received explanations of the *modus moriendi* in phthisis are insufficient. 4. It appears probable that the lethal influence of the bacillus is due to the production thereby of certain poisonous products. 5. Clinical and experimental evidence appear to indicate that the morbid secretions from the respiratory surfaces afford a good medium for the growth of the tubercle bacillus and, presumably, for the elaboration of such products. 6. Such a product is separable from the carefully selected and prepared sputum. 7. This product is possessed of well-marked physiological properties, being eminently toxic to frogs, mice and other animals. 8. The toxic properties of the product are, speaking generally, depressant. 9. More particularly they include a marked depressant influence on the heart. 10. This depressant influence seems to be exerted through the medium of cardio-inhibitory mechanism. 11. The toxic action of the product is more or less completely opposed by atropine. 12. The amount of the product which may be separated appears to bear a distinct relation to the abundance of the bacillar elements present. 13. Absorption of the poisonous product most probably occurs by way of the lymphatic circulation.

WHAT THE MORPHINE HABIT WILL DO.—The ingenuity of morphine victims to hide their vice has never been better illustrated than in the case of a young girl at a fashionable young ladies' boarding school, near Philadelphia, as told by a contemporary.

The disclosure came about accidentally. When the young student returned to the school this fall she had periods of deep despondency, and often asked the privilege of going to the room in the seminary set apart as a hospital. There she would lie for a day at a time, only rousing herself when any one approached the table, on which stood an ink-bottle and a stylographic pen. The nurse having occasion to send a message to the doctor, attempted to write with this pen, the young girl at that time being asleep. The pen not only refused to write, but the practiced eye of the

nurse instantly recognized in the point the puncturing needle of a hypodermic syringe. This led to an examination of the ink-bottle. It was a four ounce bottle, but there was no ink in it. It was painted black on the outside, and contained Magendie's solution of morphia, enough for 128 one-half grain doses, or sufficient to last till the Christmas holidays. The principal of the school was summoned immediately, and the sleeping girl's arm bared. It was punctured from the shoulder almost to the hand, and the livid blue marks confirmed the suspicion, which was changed to absolute certainty, by the small abscess which had begun to form in the forearm just above the wrist. The habit had been formed about two months only, and there is a possibility that a cure can be effected.

Incubation of the Infection of Measles.—Dr. Sevestre, in a thesis recently published, demonstrates the fact that the period of incubation in measles is almost invariable—between thirteen and fourteen days elapsing between the moment of infection and the appearance of the rash. The fever appears four days earlier, viz., between the ninth and tenth day. Another fact, and one of far greater importance, has been determined by Dr. Sevestre, and that is that the infective power of the disease commences with the first moment of prodromic manifestations, viz., of the appearance of fever, and continues with unabated virulence until the eruption, after which its infective power diminishes very rapidly, vanishing entirely on the fifth day thereof. In the analysis of many hundred cases, not one instance of infection after the fifth day of eruption (the eighteenth or nineteenth after exposure) could be found. The practical bearing of these facts are manifest. They furnish a sure and valuable guide on points upon which the profession and laity have strangely blundered hitherto, viz., the proper time for isolation of the patient. The habit of sending off the apparently unaffected members of a family, while the fever in an affected one is at its highest, is the surest method of transporting the infection and creating new foci of disease.—*St. Louis Med. Jour.*

Inoculation against Typhoid Fever.—Inoculation against typhoid fever is the latest sanitary possibility. Brieger has discovered that typhoid bacilli secrete a ptomaic poison which he has called "typhotoxine," the injection of which into animals seems to have caused lesions very similar to those caused by typhoid fever in man. As a result of researches these conclusions appear: 1. The symptoms and alterations observed in animals in which culture of typhoid bacilli had been injected are due to the toxic substances secreted by these bacilli. 2. The noxious germs which secrete the typhotoxine are reproduced in the intestinal canal. From these the ptomaine is taken up by the circulation and carried to all the organs liable to be affected by this poison. 3. It is most probable that the same takes place in abdominal typhoid fever of man. 4. A first infection insures immunity against injurious effects of a later infection, even of large quantities of the toxic substance. 5. Further experiments and careful clinical investigations are necessary in order to establish a scientific support of the theory of immunity from injections of sterilized cultures containing not more than a determined quantity of typhotoxine. 6. In case this theory be an ascertained fact, the reproduction of the same immunity in man would be justified by commencing with very minute doses of typhotoxine, which would be gradually increased according to the results obtained.—*The Sanitary News.*

A Ready Method of Removing Foreign Bodies from the Anterior Nares.—Physicians are often called upon to remove peas, buttons and various substances from the nostrils of children who have themselves introduced them there. A ready method for removing such substances is described by Mr. T. Osborne-Walker, in the *Lancet*, where he states that recently a little boy was brought under his care with a button tightly impacted in the angle between the vomer and os nasi, at the bridge in the right nostril. Ineffectual attempts at extraction had evidently been made, as shown by blood oozing from the nostril, and some, coagulated, adherent to the button, partially concealing its outlines from view, and also by the button being fixedly jammed in. In such cases, to prevent struggles and interruption, the child's arms, hands and legs should be first confined, by folding tightly around these and the body a long, clean apron, and then placing the child on an attendant's lap, facing the window, while the operator stands behind the patient, and, bending over and depressing with two fingers of the left hand the apex of the nose, to admit as much light as possible upon the object to be removed, with the right hand very carefully to avoid its descent into the pharynx or larynx, the spoon end (with the concavity directed forward) of an ordinary pocket-case director should be introduced, with which at once with a simple lever movement or jerk the foreign body may be readily ejected.

By attention to the following points the removal is instantaneously effected: The close confinement of the hands, arms and legs by a shawl, blanket or apron; a good light; a reliable person to securely hold the child; the position of the operator behind the patient; depressing well the apex of the nose to obtain a good view of the object; and, lastly, getting the concave face of the spoon of a director fairly behind the body before making the forward lever movement.—*Amer. Med. Digest.*

OXYGEN IN PUERPERAL ECLAMPSIA.—A. Bompiani reports, in the *Osservatore*, September 25th, 1887, two cases of eclampsia with albuminuria, occurring during pregnancy and during confinement, in both of which he employed oxygen. In the first case, which was proceeding to a fatal termination, he endeavored by the use of oxygen to obviate the asphyxia, which transiently developed, and was dependent upon the condition of the lung; while in the second case, which survived, oxygen was employed as a last resource, and effected the disappearance of the anasarca, as well as of the convulsions.

The first patient, was a young woman twenty-seven years old, who, at the end of pregnancy, was seized with convulsions, which occurred every fifteen minutes. Bromide of potash, chloral hydrate, leeches, warm vaginal douches, subcutaneous injections of morphine were without effect, and coma and asphyxia were strongly developed. Inhalations of oxygen produced slight improvement; the child was delivered by forceps; but the patient died after nine inhalations.

The second patient was a young woman at the end of pregnancy, who was seized with violent convulsions. A living child was delivered by the forceps; but, after delivery, fresh paroxysms developed, against which inhalations of oxygen and injections of ether were successfully employed.—*Deutsche Medizinal-Zeitung.*

DURATION OF LIFE IN MODERATE DRINKERS.—The great insurance companies of Great Britain have, by their official action, pronounced the teetotalers longer lived than those who make even a moderate use of spirituous liquors. The companies in question have for a series of years kept separate registers of all their beneficiary members, the total abstainers being classed apart from the moderate drinkers. As a result of these records, they find the advantage in respect to longevity decidedly in favor of the teetotaler. One of the largest and oldest of these companies, which has kept separate registers for twenty years, declares that, among the strictly abstaining class, the real mortality has fallen short by thirty per cent. of the ordinary expectancy; while fully ninty-nine per cent. of moderate drinkers have attained this expectancy. Caine, a member of parliament, concludes, from a study of statistics, that the total abstainers have an average duration of life exceeding by six years that of moderate users of even the lighter beverages. such us wine and beer. There are now insurance companies and societies for mutual aid lesigned exclusively for total abstinence men; the taking of even an occasional glass of any intoxicant vitiates their policy.—*Med. and Surg. Rep.*

SOME OBSERVATIONS UPON PELVIC CELLULITIS.—Dr. Hardon concludes an article in the *Atlanta Med. and Surg. Jour.* as follows:—My object in writing this paper is to submit the following propositions: 1. Acute pelvic cellulitis in the stage of infiltration may frequently be aborted by aspiration. 2. Chronic pelvic cellulitis rarely, if ever, exists except as a sequence of a previous acute pelvic cellulitis. 3. Hardness and tenderness in the broad ligaments, as a result of pelvic venous engorgement, are commonly mistaken for chronic pelvic cellulitis. 4. The treatment of such engorgement by raising the womb in the pelvis relieves the constitutional as well as the local symptoms, and places the patient in a suitable condition for a radical operation more speedily than the methods of treatment commonly in vogue.

HOW TO KEEP ICE FROM MELTING.—It is often a most important matter to be able to preserve ice from melting quickly in the sick room. Various devices have been suggested for this purpose; but the most efficient seems to be one proposed by Dr. Julius Stumphf, in the *Allg. Med. Central-Zeitung.* Dr. Stumphf recommends the use of chaff—barley chaff. He says that a piece of ice placed in a bag, and then in a box or basket containing enough barley chaff to surround it with a layer of five or six inches thick, will not lose 25 per cent. of its weight in five or six days, in a room, the temperature of which is between 70° and 80°. This suggests an excellent way to preserve various articles of food and drink, as well as ice itself.—*Med. and Surg. Rep.*

A NEW DANGER FROM OLD RAGS.—A writer in the *Lancet* calls attention to an unsuspected danger from old rags, cloth and rubbish. A lady, the head of a school, found a miscellaneous mass of such stuff in a number of bolsters and pillows that had been in use in the school. It seems that the practice of stuffing bedding with such material is very common. It is possible that this may account for some of the mysterious outbreaks of of infectious diseases in schools and families.—*Jour. Am. Med Assoc.*

POISONING WITH CHLORATE OF POTASH. — Dr. George T. Welch reports in the *Transactions of the Medical Society of New Jersey*, for 1887, a case of poisoning with chlorate of potash. The subject was a woman, 28 years old, who took at one draught four fluid ounces of a saturated solution of this salt. She had great prostration, straining, vomiting and frequent micturition. Her stomach was emptied with an emetic, and nerve stimulants and opium were administered. The next day she was quite recovered.—*Med. and Surg. Reporter.*

THE CANADA LANCET.

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The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE CANADA LANCET.

The CANADA LANCET with this issue appears under new management and proprietorship Owing to the death of Dr. Fulton, this change has been rendered necessary, and henceforth the CANADA LANCET will be the care and property of Drs. J.L. Davison and C. Sheard, of Toronto, who are determined to make the journal, even more than in the past, one which shall take a foremost place among the standard medical journals of the day.

Arrangements are now being made to secure the assistance of many eminent physicians and surgeons in New York and Philadelphia, by whose aid we hope to be able to furnish a reasonable number of original articles in addition to those produced by Canadian medical men. Negotiations are also being made with many eminent European authorities for the same purpose. There will also be a regularly engaged staff correspondent in each important medical centre, whose special duty will be to report interesting matters occurring in hospital practice, and the new management confidently anticipates in the CANADA LANCET a production worthy the continued support and confidence of the medical profession of Canada.

It may be mentioned that Dr. Davison has had the entire control of the editorial department of the journal during the past two years. All matters of a business nature should be addressed to Charles Sheard, M.D., 314 Jarvis St., and all editorial matter to Dr. J. L. Davison, 12 Charles St., Toronto.

TREATMENT OF SCARLET FEVER.

This very serious disease has almost as many different modes of treatment as there are physicians in practice. Few specifics are vaunted for its cure, though there are not many diseases which have not had, at one time or another innumerable alleged specific remedies proposed and certified to by the profsssion. Mild cases are often the most troublesome, for the patients being mostly children are with difficulty kept in bed or even in one room, and as some of the most dangerous sequelæ only show themselves after the disease has been running for a number of days, this confinement does not always commend itself to the parents, who are with difficulty made to understand the necessity for it. Thus in a mild case, when the child has been playing about the house, as bright and animated as usual, and complaining of but little discomfort, the disease may not be diagnosed with certainty for some days; yet when the dangerous period approaches great care must be taken that the proper hygienic measures are carried out, or what at the outset appeared a simple case may end very unpleasantly or even fatally. Even in mild cases a certain amount of angina and blood deterioration are present, so that some medication is necessary. The old fashioned mixture containing pot. chlor., and tinct. ferri mur., with simple syrup, will prove perhaps as useful as any, by acting upon the throat and tending to prevent the anemia which so frequently follows scarlet fever. The amount of pot. chlor. should to be small, as it acts prejudicially upon the kidneys, producing in some cases uremia and suppression of urine.

For high temperatures the wet pack, or sponging, or a bath gradually cooled down is indicated; but though the profession generally recognizes the usefulness of this therapeutic measure, as also its complete safety, it is rarely resorted to in private practice, for the reason that the public hold still to the belief that the application of cold is dangerous.

in all fevers and especially in the exemthemata. Salicylate of sodium is said to be more efficient for the reduction of the high temperature than the older remedy, quinine, and besides is better borne than the large doses of the latter necessary to influence the heat production. Aconite is not much resorted to, owing to its depressant action. It should be used with great care, especially with children. The majority of physicians have recourse to local medication for the foul and offensive secretions, which in severe cases occur upon the faucial and nasal mucous membranes. Some antiseptic, as boracic acid, may be added to the regular mixture; or if the child be old enough to gargle, the same remedy may be used in this way, while the nasal passages may be kept sweet and clean, and much discomfort avoided by using a spray of some antiseptic solution. One half drachm of carbolic acid to two ounces of glycerine and six ounces of lime water is a very useful preparation. When the glandular symptoms are severe, most practitioners apply compresses of various degrees of heat and moisture to the neck.

As to the hygienic treatment, good ventilation and a uniform temperature is absolutely necessary. The temperature should be from 65° to 70° during the course of the fever, but when desquamation begins, it should be somewhat higher, so that there may be less danger of the patient being chilled at night when partially uncovered. The patient, even in the mildest cases, is no doubt safer if confined to his bed for three wecks, and then for a fortnight more to one room. By this means one of the most dangerous complications, namely, nephritis, is usually avoided. Henoch is not a believer in the theory that catching cold produces nephritis, but as Lewis Smith says, there is abundant evidence that kidney trouble is less frequent in those cases where the patients have been warmly clothed and protected from the vicissitudes of temperature.

The inunction of the whole surface except the face, night and morning, with carbolized oil, 1 in 40 to 1 in 20 is, highly spoken of as a measure which relieves the dryness and itching so irritating to the patient, and at the same time is prophylactic during the desquamation of the skin. Alcohol is an absolute necessity in grave cases, and may be pushed without fear of untoward results. At the same time nutrition must be attended to. Barley water with raw white of egg added, jellies, broths, milk, or some of the prepared foods may be tried according to circumstances.

For the great thirst which is so frequently complained of, ice, black currant water, or a little raspberry vinegar will be found grateful. The cerebral symptoms are perhaps best treated by the application of cold to the shaven head.

Tonic medication should be continued during and for some time after convalescence, to counteract the anemia which is usually present.

IRON IN ENTERIC FEVER.

The trend of modern therapeutics is to constantly seek after some new thing. A rivalry appears to exist among the profession as to who shall be the first "by whom the new is tried," to the great danger that older remedies of established virtue may not only be laid aside but wholly lost sight of. If, in every case, these novelties proved of equal or superior utility, their rapid introduction and frequent administration, by all who desire to advance with the age, might be justified. But it is against all experience that such results could be anticipated, or that more than a small percentage could even be equal to those older remedial agents which have been established by the critical test of time.

A strong probability, therefore, clearly exists, that many of the new and much vaunted remedies may supplant more valuable medicines, to the disadvantage of both patient and physicians, the possible retrogression of medical science and the discredit of the profession.

Among the great variety of remedies of alleged utility in typhoid fever, we trust with some confidence, born of experience, in iron, and especially to the tinct. of the muriate. From its well established therapeutical virtues in restoring to health those suffering from impoverishment of the blood, and evil effects resulting therefrom, and its undoubted potency in antagonizing the consequences of morbid alterations of the blood, and the dyscrasia produced by many diseases; we conclude that iron should be useful in that condition of the blood produced by enteric fever.

Hydrochloric acid has long been found useful in this malady, and by combining with iron, we are convinced that its virtues are greatly enhanced.

Tinct. of iron meets several of the indications, independent of its constitutional effects. It is an astringent, an antiseptic, and combined with quinine, a most potent stomachic tonic. By its administration, it is almost directly applied to the locality in which the disease is seated, and benefits the diarrhea, checks the tendency to hemorrhage, acts antiseptically on the contents of the bowels, and possibly on the ulcers, and, we have, found agrees with the stomach as well as most other remedies. We are aware that some recent authorities dispute the correctness of some of the views hitherto entertained in reference to the therapeutical qualities of iron, its mode of action, and effects. Yet we hold that its evident utility in many diseases where the blood is impoverished or morbidly altered, cannot be successfully disputed. Experience has taught us that it is eminently useful in enteric fever. We have employed it for over ten years, in addition to the usual approved remedies, and have made it the central remedial agent in this disease, around which other subordinate remedies were prescribed, as circumstances seemed to indicate. If permitted to found an opinion on the results attained, we can truthfully assert that it is actively serviceable. We admit it is possible that the very satisfactory results may not have been attributable to the iron; but this is not probable. We know that we have been more successful in the treatment of typhoid since we began its use than before. During the past year we havetreated no inconsiderable number of cases, without a single death. That it is destructive to, or prevents the multiplication of typhoid bacilli, we know not, nor are we in any sense assured as to what its manner of action is, bnt we believe firmly in its value in this disease. Of course we do not advocate its exclusive use in any case, but as it does not in any way interfere with the usual approved treatment, and can be administered without risk, we bespeak for it a trial at the hands of the profession, that fnrther experience may either establish its value in typhoid, or prove its worthlessness, and relegate it to the extensive list of useless remedial agents for that disease.

THERE are fifteen thousand nurses in Great Britain. Mr. Henry C. Burnett is now advocating the establishment of a national pension fund for them and for hospital officials.

CHIAN TURPENTINE IN THE TREATMENT OF UTERINE CANCER.

The question of the curability of this scourge by the use of Chian turpentine is still causing some debate. Mr. Clay, of Birmingham, was the first to speak well of the treatment. From time to time cases of cures have been published in the various medical journals. Mr. Clay, as late as 1881, wrote to the *Lancet* as follows:—

"An enlarged experience, however, has confirmed the statements made in my original paper, and I have now the satisfaction of being able to declare that I have nothing to withdraw or to qualify as regards the statements I then made as the result of observation as to the effects of Chian turpentine in uterine cancer."

Unfortunately the number of failures has been so far in excess of successes for this remedy, that few in the profession, in this country at any rate, have any faith in its power to check the morbid growth. We do not know that it has ever been sufficiently tried here to decide *pro* or *con* as to its value. In one case which came under our notice, the patient, who was the daughter of a medical man, was, or thonght she was greatly relieved by its use, but she eventually died of the disease.

The truth as to the value or worthlessness of the remedy is of such vast importance that it would be well if more light could be thrown on the subject. Mr. Elder, of Nottingham, makes an appeal (*Lancet*, Dec. 3) to the profession as follows:—

"From time to time he (Mr. Clay) has favored his professional brethren with repeated cures of cancer by this remedy, and even so recently as in your last week's issue three more examples are given. But what about the failures? In the interest of the public at large, such claims as Mr. Clay makes for Chian turpentine ought not to pass unchallenged by those who differ from him. Unfortunately, examples of cancerous disease are only too common upon whom this remedy (supplied, if necessary, by his own chemist) might be tested by a tribunal in whom the profession at large would have confidence, and the doubt once and for all resolved. If this drug came out of the ordeal triumphantly, then I feel sure there would not be a single dissentient to Mr. Clay occupying a position not inferior to Jenner or Harvey, as one of the greatest benefactors of our species; but if, on the contrary, it is wholly useless as a remedy, then let it drop into a well-merited, and not too premature oblivion."

The suggestion as to where the drug is to be

obtained is a valuable one. A drug which is not even mentioned in such text-books on Materia Medica as those of Lander, Brunton, and Bartholow, will not be likely to be obtained pure from the ordinary chemist. There seems to be something essentially unscientific in the treatment of such a pathological condition as a cancerous os, by the internal administration of medicine; but equally strange propositions as to the treatment of disease have proved beneficial to humanity, which, after all, is the great end for which we are working.

DISPOSAL OF SEWAGE.

From the excellent report of the Maryland State Board of Health, lately received by us, we take the following conclusions as to the disposal of sewage. They are clear and to the point, and deal with a matter which is becoming of greater interest every day. The whole profession both in the city and country should be aroused to the necessity of more attention being paid to sanitation. When we read of the scourges of epidemics of diphtheria, typhoid and other *preventible* diseases, and consider what they cost the country in cash, it is to be wondered at that the powers that be do not aid the various health organizations more generously, not only by placing adequate sums of money at their disposal for the carrying out of their *absolutely necessary* work, but also by so legislating as to give them the necessary power to make that work a success, not in theory or on paper, but in practice.

The conclusions are as follows:

"1. That the proper disposal of sewage involves the beneficial appropriation of refuse matters, so as to make them actually productive, avoiding interference with those domestic uses of inland waters for which they are properly adapted. 2. That sewage matters should be made available for agricultural purposes, and the results in this respect are limitable only by considerations of expense as weighed against the value of the result. 3. That the great importance of avoiding all sources of unhealthy and offensive effluvia, and of preserving the foundations of buildings and the sub-strata of towns and cities in a dry and clean condition, creates an absolute necessity for relinquishing cesspools and all receptacles for sewage connected with any building or other place, except such as are thoroughly water-tight and for the most part air-tight. 4. That all unhealthy putrescible matters should be removed at short intervals from within the limits of centres of population, either by means of air-tight pipes, or in vessels or tanks hermetically closed. 5. That privy-pits, unless they are perfectly water-tight, will infect, *(a)* the surrounding soil by transudation of their liquid contents; *(b)* the air by exhalations or gaseous emanations through a polluted soil; *(c)* the sources of domestic water supply by percolation through intervening strata of earth. 6. That the use of water from dug wells should be prohibited for drinking and culinary purposes in every instance where privy-pits not absolutely water-tight exist in proximity to or within 1,000 feet of such wells. 7. That there exists between the air of water-carriage sewers and the external atmosphere a constant interchange, and as is the air of the sewer, so will be the air of the street. 8. That without considerable fall or grade, flushing is utterly inefficient for cleansing sewers, except where the matter is carried by pneumatic pressure or aspiration, even in the case of small sewers with large quantities of water. 9. That the impermeability of brick sewers can never be absolute, and, therefore, should they convey excrementitious matters, the surrounding soil and the water of neighboring wells will be at all times liable to dangerous contamination. 10. That excrementitious matters ought to be rigidly excluded from all storm-water sewers. 11. That the epuration of sewage water by the soil alone is not efficient in a sanitary point of view, as has been demonstrated by both experience and chemical analysis. 12. That no system of sewage can be approved, which permits the pollution of either air, water or soil; and that, in order to fulfil the requirements of proper sanitation, all excrementitious matters and kitchen slops should be conveyed from towns by pipes absolutely air-tight, or in hermetically-closed vessels to a point sufficiently distant, where they may be manufactured into a dry manure powder without offence."

SUPERFETATION.—Dr. Godfrey, writing to the *Lancet*, gives the following account of an interesting case of superfetation: "I was called on August 17th of the present year to Mrs. H——, aged twenty-nine, to attend her in her fourth confinement. She stated she was seven and a half months gone and had been in pain all night, with considerable loss. On examination I found a three and a half months' fetus in the vagina, which came away without difficulty. The uterus was large, rising about two inches above the umbilicus, and I could distinctly feel the movement of another fetus. The placenta did not come away, and all pain ceased. I then left her, as there was no hemorrhage or pain, and returning in an hour and a

half found things *in statu quo*. This state of affairs continued for four days, when the pains returned, and the breech of a child was born before my arrival. I immediately removed the child, still-born, though the nurse informed me that the legs moved after their delivery. The child must have been quite seven months, as the nails were commencing to form and its weight was 4¼ lbs. The placenta of the second child came away naturally, but was followed by a great deal of hemorrhage; there was no sign of a second after-birth attached to it. Traction on the smaller cord failed to detach its placenta, so I introduced my hand into the uterus and removed it piecemeal; it was completely adherent and attached to the upper zone on the right side, measuring about three inches across; it was not putrid. All the bleeding immediately ceased, and my patient made an excellent recovery, without a drawback."

THE VOMITING CENTRE. — Professor Fremas, (*Lancet*) who has been investigating the subject of vomiting, finds that in dogs and cats, section of the medulla at the level of fourth ventricle does not prevent the induction of vomiting by hypodermic injections of apomorphia. By touching different parts of the medulla with a weak solution of apomorphia, so as to induce vomiting, he was able to localize with tolerable precision the situation and extent of the vomiting centre, which he says lies in a small space before and behind the calamus, and in the deeper layers of the medulla. He believes that the absence of vomiting, which is observed in ruminants, rodents, and some other classes of animals, is due to the absence in them of a vomiting centre, or to the very rudimentary condition in which it exists. In a rabbit on which he tried in every way to induce vomiting, no signs of gastric movement of that nature could be detected.

FRACTURE OF COCCYX, WITH SUBSEQUENT SPONTANEOUS REMOVAL.—Dr. W. J. Jolly writes to the *Atlanta Med. and Surg. Jour.* thus:—I was called to Mrs. M., November 1st, 1887, primiparæ, aged 21 years, who was in labor. Nothing unusual occurred until the head was pressed against the coccyx, which did not yield. I applied the forceps and delivered her without any trouble and without any laceration of perineum. Immediately after delivery she suffered intense pain in the region of the coccyx, for which I gave an opiate and examined the bone. Found some displacement which I corrected, supposing it to be fractured. The opiate soon relieved the pain; she did not suffer any more until the 9th day, except some tenderness in the region. She had some slight pain on that day. On the 10th she passed a bone per anum and sent it to me, stating that she thought she had passed a joint of her backbone. Upon examination I found it to be the lowest segment of the coccyx. She has had no trouble since. As I have not seen a similar case on record, I send it to you for publication.

THE BINIODIDE OF MERCURY IN GONORRHŒA. —Dr. C. K. Illingworth writes to *The Br. Med. Jour.* that he finds the biniodide of mercury very serviceable as an injection in gonorrhœa when used in solution with iodide of sodium. He combines it as follows:—

R.—Sol. hydrarg. bichlor., ... ℥ij.
Sodii iodidi, ... ʒss.
Sol. morph. (B.P.) . . . . . ℥ss.
Sodæ bicarb., ... ʒjss.
Zinci sulph., ... gr.x.
Aquam ad, ... ℥vj.
M. et solve. Ft. inject.

THE ACTION OF SALINE PURGATIVES.—The following are the conclusions arrived at by Lenbuscher (*Edin. Med. Jour.*), as to the action of saline purgatives:—"1. That an exaggeration of the peristaltic movement of the intestine only plays a secondary part in the action of saline purgatives. 2. In whatever manner saline purgatives may be introduced into the intestine, the intestine becomes the site of a great secretion of liquid, which is the principal cause of the purgative action. 3. It is impossible to claim for saline purgatives that they act as a barrier to re-absorption. 4. Saline purgatives introduced into the circulation in sufficient quantity produce constipation."

OUR NEW YORK LETTER.—We regret that owing to the sudden and unavoidable departure of our correspondent from New York, we have no communication from that city in this issue. We shall endeavor to make such arrangements as will ensure for February, and all subsequent numbers,

a regular letter from our own correspondent in that city, as well as from London and other great centres of medical learning. This will, we hope, place before our readers a useful digest of some of the latest ideas in medical science, with methods of treatment, new inventions, etc., all of which we fear not, will be appreciated by our patrons.

THE CARDIAC RELATIONS OF CHOREA. — Dr. William Osler has carefully re-examined (*Am. Jour. Med. Science*) 110 of the choreic cases treated at the Infirmary for Nervous Diseases between 1876 and 1885. In each case the patient was examined more than two years subsequent to the attack of chorea. He found 43 normal hearts, 53 with organic and 13 with functional troubles. He draws from his study the following conclusions :

1. That in a considerable proportion of cases of chorea—much larger than has hitherto been supposed — the complicating endocarditis lays the foundation of organic heart disease.

2. In a majority of the cases the cardiac affection is dependent on rheumatism, and cannot be regarded as in any way associated with it; unless, indeed, we hold with Bouillaud, that in the disease "*chez les jeunes sujets, le cœur se comporte comme une articulation.*"

3. As the presence of an apex systolic murmur in chorea is usually an indication of the existence of mitral valvulitis, as much care should be exercised in this condition as in the acute endocarditis of rheumatism. Rest, avoidance of excitement, and care in convalescence, may do much to limit a valvulitis, and obviate, possibly, the liability to those chronic nutritional changes in the valves wherein lies, after all, the main danger.

TURPENTINE IN DIPHTHERIA.—Not a few practitioners in this country have strong faith in the beneficial action of turpentine in diphtheria. It will, therefore, be interesting to know the results in fifty-eight cases treated by it by Röse, of Hamburg (*Therap. Monats.; Med. Prog.*). He had a mortality of five per cent. His treatment was as follows :—

He gave oil of turpentine three times a day in teaspoonful doses, mixed with spirits of ether. A teaspoonful of a 2 per cent. solution of sodium salicylate was also given every two hours. Externally an ice-bag was used, and gargles of a 1 per cent. warm solution of chlorate of potassium. This treatment gave the following results :

1. Rapid lessening of the pulse-rate and of the temperature. 2. Rapid alleviation of the subjective symptoms. 3. Shortening of the duration of the illness. 4. No exacerbation of the local process after the first dose of turpentine. 5. Only once was there danger of suffocation, and tracheotomy was done.

Röse thinks that pencilling the throat, as done in private practice, is generally useless. He uses great caution in pushing the turpentine in anemic cases, and in patients with weak hearts; and excessive cardiac action, from any cause, was carefully treated. The food given in his cases consisted of bouillon, old port wine and milk; and ice and aërated fruit juices were given to quench thirst. The turpentine was discontinued when the patient was free from fever. In ordinary cases doses of from 3 to 5 drachms were used, and no intoxication was seen. In one case paralysis occurred, but the patient recovered under the use of chlorate of potassium.

INFANTILE MARASMUS.—The following conclusions have been arrived at by Dr. Isaac N. Love (*St. Louis Courier of Medicine*) as to the cause of infantile marasmus :—

1. Infantile marasmus is dependent primarily on torpidity and inactivity of the glandular system; and is aggravated by unsuitable, over-abundant, or insufficient food and unsanitary surroundings. 2. It is of the first importance, in treatment, to arouse secretion and excretion, the best remedy being calomel in one-twentieth of a grain doses, with the free administration of water; both of these agents exciting glandular action, stimulating the secretion of the digestive juices, and promoting diuresis and intestinal secretion. 3. "In the matter of diet, mother's milk is the best, and some other mother's milk the next best." 4. In extreme cases, administer soluble foods in the forms of baths, and practise gentle friction and massage, with an occasional bath in water containing a diffusible stimulant.

SPARTEINE, THE NEW HEART TONIC.—The

following are suggested by Langgord (*Therap. Monats.*), as useful formulæ for the administration of sparteine in heart disease :—

R.—Spartëin. sulph., ... gr. iij-vij.
Aq destil., ... ʒijss. Sol.
Sig.—Twenty drops from two to four times daily in sweetened water or wine.

R.—Spartëin. sulph., ... gr. iij-vij.
Syr. aurant. cort., ... ʒxijss. Sol.
Sig.—A small teaspoonful in water from two to four times daily.

Phthiriasis Pubis.—We take the following from the *N. Y. Med. Jour.:* The treatment of phtheriasis pubis by the usual blue ointment has so many inconveniences, with its disagreeable application and its after toxic effects, that I will speak of the use made of the well-known antiparasitic action of salicylic acid. The formula given is :—

Salicylic acid, ... 2 to 3 parts ;
Toilet vinegar, ... 25 parts ;
Alcohol (80 per cent.), . . 75 parts.

The parts are to be rubbed with a piece of flannel wet with the mixture. In most cases a single application will be enough to destroy the pediculi.

Eczema.—Dr. Crocker proposes (*Med. Age.*) to treat recurring eczema as follows : He applies a counter-irritant, not to the part affected, but to other parts of the body which have some connection with the nerve centres. The counter-irritant used is an ordinary mustard leaf, but when that is not sufficiently strong a blister is produced with liquor epispasticus. For the face alone the mustard leaf (or blister, as the case may be), is applied behind the ear ; for the face and forearms apply it to the nape, and for the leg the counter-irritant should be applied on the hip over the large sciatic nerve. In most cases this treatment has been followed by removal of the itching, and the relief lasts from one to several nights. The redness and swelling are also relieved. This does not interfere with local treatment.

Hypnotism is to be investigated by a committee appointed by the French Academy of Medicine, Among those on the committee are Charcot. Brouardel and Marey. Their reports will be full of interest to the world at large, but especially so to the medical profession, opening up, as it professes to do, new avenues for the amelioration and cure of many diseases hitherto intractable an incurable.

The Administration of Phosphorus.—The following is a very convenient formula for phosphorus (*Therap. Gaz.*) :

R.—Phosphori, ... gr. $\frac{1}{6}$.
Ol. amygdal, ... ʒiij.
Aq. dest., ... ʒiij.
Gummi arab., ... ʒiij. M. ft. Emuls.
Sig.—Dose, one teaspoonful.

Treatment of Tape Worm.—Bettleheim (*Centralbl. fur Klin. Med.*) recommends the following :

R.—Ext. filicis maris æth., . . . gr. 150.
Ext. pumicæ granati, . . ää gr. 150.
Pulv. jalapa, ... gr. 45. M. et div. in pil. lxx., coat with keratin.

Take from 15 to 20 of these on the day of fasting, which is preceded by purgation, and the remainder on the following day, in two or three hours. When necessary, this treatment is followed by a purge. The pills are not dissolved until they have passed into the intestines, and so nausea, vomiting, and other discomforts and annoyances so often associated with the taking of vermifuges, are avoided.

Cure for Drunkenness.—Another cure is reported by the *Med. World.* A half ounce of ground quassia is steeped in a pint of vinegar. A teaspoonful in a little water should be taken every time the liquor thirst is felt. It satisfies the cravings and produces a feeling of stimulation and strength.

Coroners.—Dr. J. F. O'Keefe, of Tilbury Centre, has been appointed asociate coroner for Kent.

Dr. Squire reports (*Med. Rec.*) the following. "Mr. R——, fifty years of age, noticed, some eight or ten years ago, that his heart acted very slowly, and on being examined by a physician was told his pulse was but thirty-two to thirty-four per minute. He has kept close watch of it ever since. Each year it has lost one beat, until now it numbers but twenty-four pulsations per minute. His general health is tolerably good, but he has to guard against exertion and keep very quiet, or he is set to panting."

Books and Pamphlets.

THE PRACTICE OF MEDICINE AND SURGERY APPLIED TO THE DISEASES AND ACCIDENTS INCIDENT TO WOMEN. By Wm. H. Byford, A.M., M.D., Professor of Gynecology in Rush Medical College and the Woman's Medical College; Surgeon to the Women's Hospital, of Chicago, etc.; and by Henry T. Byford, M.D., Surgeon to the Women's Hospital, of Chicago, Gynecologist to St. Luke's Hospital, etc. Fourth edition, revised, re-written and very much enlarged, with over 300 illustrations. 8vo, pp. 800. Philadelphia: P. Blackiston, Son & Co. 1887.

This standard work has been so favorably known to the profession for so many years that, important as it is, we need only draw attention to some of the new and original matter which has been added to the preceding edition. The principal additions are the chapters upon the "Anatomy and Physiology of the Female Pelvic Organs"; "Examination of the Female Pelvic Organs"; "Displacements of the Uterus"; "Affections of the Ovaries" and "Fallopian Tubes"; and the paragraphs upon "Oöphorectomy," "Tumor of the Broad Ligament," etc. Many changes have been made in other chapters, others have been re-written, and now the work stands we believe for what its authors intended it, a complete and practical work, and one which will be a safe guide to the practitioner in this portion of the field of medical science. The illustrations are good and the publishers have done their part well, as indeed they always do. The book is a very valuable addition to gynecological literature, and we heartily commend it to the student and general practitioner, and believe it will be appreciated above all by the specialist in this department.

FUNCTIONAL NERVOUS DISEASES, THEIR CAUSES AND TREATMENT, with a Supplement on the anomalies of refraction and accommodation of the eye and of the ocular muscles, by George T. Stevens, M.D., Ph. D. New York: D. Appleton & Co. Toronto: Carveth & Co., 1887.

The above is a memoir which received from l'Académie Royale de Médicine of Belgium the highest honor awarded for competition in 1881-1883. The work is essentially the same as the memoir which was so favorably judged by the Academiy, with a supplemen tas above noted. This supplement is not intended for the expert ophthalmologist, but for the general practitioner "who would like to make such examinations of ocular conditions as will enable him intelligently to advise and treat his patients affected with nervous disease." The idea of the author is that difficulties attending the function of accommodation, and irritation arising from nerves involved in the various acts of vision are commonly the causes of functional nervous disturbances. The photogravures used to illustrate cases cited are very interesting and instructive.

THE AMERICAN NEWSPAPER ANNUAL FOR 1887. Philadelphia: N. W. Ayer & Son.

A valuable book for newspaper men, containing a catalogue of American newspapers both of the United States and Territories, and of the Dominion of Canada, with information concerning circulation, etc., names of editors and publishers. The above and much more useful information as to location, area, character of soil, manufacture of each State, Territory, and County, make it a very useful guide for the judicious placing of advertisements. The book contains 1170 pages, and is a perfect cyclopædia of facts useful to newspaper men.

DR. BROWN'S COMBINED PRESCRIPTION DAY BOOK. Watford Ont. William P. McLaren.

The above will be of use to physicians who do their own dispensing, combining as it does the functions of a prescription book and an ordinary blotter. It will thus be a handy reference to all prescriptions, short notes of cases, etc., matters of no small importance to the busy practitioner. The book is well bound; pp. 497.

WIDE AWAKE FOR DECEMBER, 1887.—Holiday Number. Boston: D. Lothrap Company. Twenty cents a number. $2.40 a year.

We have just received a copy of above. It is gotten up in a very artistic way, and is specially adapted to the young. We have great pleasure in recommending it.

THE MINERAL WATERS OF VICHY AND THE DISEASES IN WHICH THEY ARE INDICATED, by Dr. C. E. Cormack. London: J. & A. Churchill. 1887.

Births, Marriages and Deaths.

On the 29th December, Dr. Henry T. Wright of Ottawa, to Marion, eldest daughter of James Graham, Esq.

At London, December 27th, Dr. W. H. B. Aikens, of Toronto, to Augusta, daughter of the late Dr. Hawkesworth, of Invermay.

In Plainfield, N. J., Dec. 6th, D. B. Bascome, M D., of Turk's Island, W. I.

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Original Communications.

SUPRA-PUBIC LITHOTOMY.

BY W. BRITTON, M.D. TORONTO.

This operation is ordinarily resorted to in preference to Cheselden's or any other modification of the perineal section, when circumstances render it the only one feasible; indeed, with the exception of the German School of Surgery, the rule the world over has been to cut through the perineum if the pelvic outlet is not contracted and the calculus small and not encysted. The first recorded case was, like the majority of its successors, unpremeditated. In the year 1551, Franco failed in extracting a stone through the perineum of a child, and in desperation determined to remove it through the abdominal wall. Some of his admirers, after mature consideration, advised its adoption not only in such cases as forbade the perineal operation, but also in young subjects; indeed, Cheselden, whose name is so closely identified with lithotomy, was for years one of its most ardent advocates, and relinquished it not through want of success, but out of enthusiasm over his new modification of the lateral.

The earliest recorded case in England was in 1700, when Proby removed a bodkin in this way from a woman's bladder. In 1718, Douglas strongly claimed for it the attention of the profession, published a work on the subject; and very unostentatiously christened the operation "Lithotomia Douglasiana." From that time up to the present century its hold on the surgical world has been marked by many vicissitudes—to-day espoused by some of the foremost, and to-morrow falling into disrepute because of the objections put forth by the many. Only lately has it been received with anything like general favor, and this revolution of opinion may be referred to the reports of a number of successful cases by Amussat, Dupuytren, Scarpa, Home and others.

A table of statistics was compiled in 1850 by Humphrey, of Cambridge; he managed to collect only 104 cases; and amongst English speaking nations no further work of any magnitude in this line was accomplished until 1875. During this interval the Germans took considerable interest in the subject, aroused chiefly by a second table compiled by Prof. Günther, of Leipsic, who collected the reports of 200 cases. In the year 1874, Dr. C. W. Dulles, of Philadelphia, devoted considerable attention to the matter; he tabulated four or five hundred cases; and comparing the results with an equal number of the lateral operation, he found that "the operation is as successful as the perineal for calculi under two ounces in weight, and has better results for larger calculi." He concludes the able article from which I have quoted, in these words:—"After thirteen years of study of this method, and an analysis of over 700 operations, I have come to the conclusion that a temperate view of the subject will lead to the conviction that the supra-pubic operation deserves to rank above all other methods of lithotomy, for stones of large size, and that its applicability to any case should be carefully discussed before deciding to cut through the perineum." In 1880, Dr. Peterson, of Kuhl, gave it a fresh impetus by his published description of the method of rectal dilatation for the purpose of elevating the bladder.

Heath says that the operation has been performed so seldom, that a comparison of its results with those of the perineal would be premature; but should it not, on further trial, prove to have a heavy mortality, it is certain to take a high place in professional esteem, and to supplant all other methods for the removal of large stones. I shall now give an epitomized history of a case of my own which occurred recently.

In November, 1887, I was called to see C. W., an active robust boy of nine years. He was suffering from the ordinary symptoms of stone, which on sounding I readily found present. When about two years old, and for some years subsequently he had been troubled with incontinence of urine, together with vesical irritability, manifested only by frequent urination; these were the only symptoms until two years ago, since which time dysuria had been constant and accompanied occasionally

by hematuria ; so it was safe to conclude that the stone was at least two years old. It did not appear to be large, and being of slow formation it was probably not phosphatic in character. I had then to deal with a hard calculus in a young patient, both of which circumstances rendered it unadvisable to perform the less serious operation of lithotrity ; and to choose between supra-pubic and perineal section was a difficult matter, until I obtained access to the pamphlet of Dr. Dulles, already referred to. In consideration of the good results shown in his table, and to avert the possibility of hemorrhage or urethral laceration, the supra-pubic method was adopted. In the operation I was assisted by Drs. W. T. Aikins and J. L. Davison. After chloroforming and sounding the patient, the bladder was thoroughly irrigated with a warm borated lotion and then injected with carbolized water ; and percussion showing that the bladder was well up in the hypogastrium, rectal dilatation was dispensed with. The ordinary incision through the abdominal walls was made and attended with only slight hemorrhage from small branches of the epigastric, which were easily secured. Instead of catching up the bladder with a tenaculum, two strong threads of silk were passed through its coats, one on each side of the proposed incision and well held up by an assistant, which materially assisted in exposing the anterior surface. The bladder incision was made as close as possible to the pubes, and only sufficiently large to admit the little finger for the purpose of exploring the interior and locating the stone which was lying loosely in the fundus. Having ascertained that it was not too large to admit of extraction through so small an opening, a straight pair of forceps was introduced, and a mulberry calculus slightly larger than a peach stone, was easily removed. After a further digital examination to preclude the possibility of leaving a second calculus, and as the incisions were made with antiseptic precautions, and the structures appeared to be in a healthy condition, it was determined to aim at primary union. Accordingly, the bladder wound was united by interrupted fine catgut sutures that did not penetrate the mucous coat and at short intervals, in order to render it watertight. The external wound was closed also after the suspensory ligatures had been withdrawn and dressed with iodoform. The metallic catheter which had been used as an aid in elevating the bladder, and a guide down upon which to cut, was now withdrawn and a flexible one substituted.

The subsequent history of the case is interesting, chiefly in the fact that nature will often surmount apparently insuperable obstacles to counteract the effects of bad nursing. Strict injunctions were given that the catheter be watched night and day lest it become impervious. For three days the case progressed satisfactorily, the patient having no pain and the temperature having risen no more than one might expect in urethral fever, when on November 28th, I was summoned to relieve the patient, who was reported to have been in pain for some hours. On my arrival I found the catheter as dry as a bone, and on removing the dressings, the wound, which hitherto had been uniting rapidly, showed signs of oozing. I cut one suture and removed the catheter, when urine not only flowed *per urethram*, but also shot up in a stream from the wound. I endeavored to pass a soft catheter through the wound for the purpose of drainage, but unsuccessfully ; evidently the vesical opening was smaller than the external one, and, lest further exploration prove disastrous, I trusted to free exit through the urethra. I ordered the wound to be frequently washed antiseptically, and dressed with carbolized ointment, re-introduced the catheter, and, instead of allowing the urine to drop into a sponge as most works direct, a small vessel was now used which the nurse was instructed to empty every hour, so that any clogging up of the catheter might be detected before damage could ensue from over-accumulation. The catheter was removed each day, washed out and re-introduced.

Whether the escape of urine occurred from the needle punctures made in introducing the suspensory ligatures or from the incision itself, I do not know ; but I feel quite confident that had the accumulation of urine been prevented, which ordinary watchfulness would have done, the patient would have been well in a week ; as it was, he went on rapidly towards recovery ; only once was there slight oozing of urine from the granulating wound, which was on December 13th, being the first occasion of natural urination ; up to this date the catheter having been retained. On December 21st, being twenty-six days after the operation, he was quite well.

So little has been written on this subject, and,

of what is written so much that is incomplete and conflicting, both as to the merits of the operation and the method of performance, that it will not be out of place to add a few plain facts

1st. It is much simpler than any modification o the perineal operation ; the only structure to be avoided being the peritoneal fold, which, with careful dissection is easily done. Contrasted with this, the perineal section is "going it blind," between the artery of the bulb anteriorly, the internal pudic externally, and the rectum behind. The wounding of any of these would prove a serious complication ; and supposing they are passed in safety, I wonder how many have succumbed to a prostate incised in a faulty manner. Supposing union occur primarily in the supra-pubic method, the danger of septicemia is averted, and in any case with proper drainage precautions, the risk of urinary infiltration and diffuse inflammation does not appear to be greater than in perineal section. The operation is not attended with hemorrhage, or the danger of wounding the rectum, the deep fascia or the seminal ducts, nor is it followed by shock or perineal fistula, both of which may occur in the lateral and median operations.

2nd. It is especially suitable for boys ; for, in their case, on the one hand, the bladder is high up with plenty of room below the peritoneum for incision, and on the other hand the perineum is usually loaded with fat, and therefore the wound must be deep and difficult of precise execution. In such cases the prostate is small—its incision must be very limited in order to be safe—the finger is introduced through so small an opening, only with considerable force, and this with danger of lacerating the thin and delicate membranous urethra, which could not be otherwise than disastrous in its consequences.

3rd. The bladder is elevated by one or all of three methods—dilation of the rectum, injection of the bladder itself, or by the tip of a metallic catheter or sound. In dilating the rectum it is recommended to use a pear-shaped rubber bag, and lest tearing of its coats occur from over distension, to allow the water to enter by gravity from a graduated receptacle through a long rubber tube ; from twelve to sixteen ounces usually proving sufficient. A double channelled silver catheter answers best for irrigating the bladder—it will also serve for dilating it subsequently by closing the returning opening—and by closing both openings it will answer as a sound for pushing up the anterior wall.

4th. The external incisions should be as close to the pubic bones as possible—and that of the bladder as low down as practicable. To this end a tenaculum, which is more easily applied than the ligatures which I used in the case described, should catch up the anterior wall well down behind the symphisis—traction on which will rotate the bladder on its transverse axis, and so throw the peritoneal fold backwards out of harm's way.

5th. The smaller the bladder incision is, the better, provided it be large enough to permit of extraction without laceration.

6th. If the coats are in anything like a healthy condition it is well to close both wounds and trust to primary union—to this end catgut sutures in the bladder are the best.

7th. The retained catheter is preferably of soft rubber ; for, although its channel is smaller in proportion than that of the ordinary elastic, it can easily be removed at intervals for cleaning, and its vesical extremity being more flexible, is more likely to lie low and drain effectively, and less liable to irritate by chance pressure against the anterior wall.

8th. It is above all things needful to take proper precautions that the bladder is thoroughly and constantly drained—and if the receiving vessel is emptied every hour, no accumulation of urine sufficient in quantity to prejudice the case can occur before the stoppage of the flow is detected.

THE INFLUENCE OF CERTAIN OCULAR DEFECTS IN CAUSING HEADACHE.*

BY F. BULLER, M.D.,
Professor of Ophthalmology, McGill University.

The influence of abnormal conditions in the organs of vision in causing headache has long been recognized, but it cannot even now be said that the nature of that influence in all its bearings is fully understood. The term eye strain is, indeed, applicable to a very complex condition, in which anatomical, mechanical, muscular and nervous influences variously combined each play their part.

* Read before the Canadian Medical Association, at Hamilton, September, 1887.

Whenever there is a deviation from the normal state in any one or more of these particulars, visual disturbance of some sort is likely to result, and with it more or less functional disturbance, of vision, as well as of other parts or organs.

In the organs of vision such disturbance of function most frequently presents itself to the ophthalmologist in some form of so-called asthenopia. Many cases of this kind are also accompanied with reflex disturbances in parts more or less remote from the eyes, the most important of which, in point of frequency at least, undoubtedly is headache. Headache from this source may attain any degree of severity, from mere discomfort to the most unbearable agony. It may be constant or intermittent, but in any case it is likely, in the long run, to resist every remedial measure until the visual difficulty, whatever it may be, is discovered and suitably corrected. Some experienced ophthalmologists go so far as to contend that nearly every case of migraine or sick headache is associated with some defect in the visual apparatus; for my own part, whilst admitting that such an association is of frequent occurrence, I am inclined to think there is a large proportion of these cases not to be accounted for in this way. Others, again, claim that all sorts of nervous disorders, including chorea, epilepsy and insanity, are often due to the same cause; on this point I am not prepared to express an opinion.

There is, however, among ophthalmologists, and through their labors, also, I think, in the general profession, a settled conviction as to the importance of ocular defects in causing headache. On this subject there is, however, but little information to be gained from the ordinary text-books of medicine, though current literature contains much that is well worth careful study.

Everyone has heard of remarkable cures of headache by the correction of certain errors of refraction, and there is, perhaps, a widespread notion that ocular defects causing headache only require the adaptation of suitable glasses to remove the trouble. This is quite true of certain cases, the correction of refractory errors may accomplish all that is to be desired. Sufferers from headache during half a lifetime, have time and again been cured in a few days by wearing the glasses that have corrected a simple hyperopia. I once saw a student who had reached the third year of his university course, a martyr to headache all the time, and subject to attacks of vomiting if if he studied longer than two hours consecutively, so disheartened that he had decided to abandon his university career, when he found himself suddenly cured of all his ailments by wearing convex cylindrical lenses of 36 inches focus. Convex sphericals of the same focal distance had been used for some time previously without benefit. Here there was only a simple error of refraction, slight in degree, but giving rise to symptoms that might readily have been mistaken for some serious organic disease. Such a case can, I take it, only be explained by assuming an instability of nerve force which a trivial disturbing element was capable of putting completely out of balance. On the other hand, it is a matter of daily experience to meet with persons whose visual apparatus presents infinitely greater deviations from the normal without setting up any noticeable mischief.

As a rule, those who suffer considerably from slight ocular defects are neurotic subjects, in whom minor ailments are apt to make more show than serious ones do in those whom nature has endowed with vigorous nerve power. But there are visual abnormalities which even the most vigorous cannot bear up against without suffering, more particularly when any unusual demands are made on the organs of vision, or when from any cause the general health becomes deteriorated. In such persons the true nature of the troubles they experience is exceedingly apt to be overlooked, unless the eye symptoms happen to predominate, which by no means always occurs.

I have said the elements which may unite to produce eye strain, though simple in themselves, constitute a complex condition when so combined. Let us consider the most important ones separately, always bearing in mind that several may be combined in the same individual.

First of all come the errors of refraction—myopia, hyperopia and astigmatism. Next we have defective muscular action both of the extrinsic and intrinsic muscles of one or both eyes, in which any one or more of these may be implicated. Lastly, there may be faults in the perceptive organs—that is, of the retinæ and their nerve centres. This third division we may leave out of the question, as a consideration of this part of the subject would take us beyond the limits of a short discourse.

It is the physiological demand for binocular vision and for distinct vision that, under certain unfavorable conditions, induces eye strain and consequent headache. We must, therefore, direct our attention chiefly to the muscular apparatus, any portion of which may be defective in power, or, what amounts to the same thing, the demands made upon it may for various reasons be greater than it can bear.

In hyperopia and in astigmatism the chief demand is for distinct vision, hence the ciliary muscle is liable to be overtaxed, and there will be accommodative asthencpia. In myopia, the muscles of convergence are placed at a disadvantage, and we are more likely to meet with so-called muscular asthenopia. Both in myopia and hyperopia, as shown by Donders, the acts of accommodation and of convergence, which are essential to binocular vision, become more or less disassociated. It is only in the emmetropic eye that they are arranged to act equally at all distances. This want of harmony between the intrinsic and extrinsic muscles is in itself a fruitful cause of eye-strain. As a manifestation of this disassociation, we often meet with the obvious muscular defect called strabismus, usually convergent in hyperopia, and and divergent in myopia. In emmetropia, the range of distinct vision, consequently both of accommodation and of convergence, is from infinity up to some near point, say a few inches distance; but in the above mentioned errors of refraction, though there is the equivalent range of distinct vision, it is displaced more or less, backwards from the normal near point in myopia, and forwards in hyperopia. Correction of these errors of refraction acts beneficially in each case by restoring the range of vision to something like its normal position, and consequently, in re-establishing the association between convergence and accommodation. Correcting glasses also act, in hyperopia, as a direct relief to the ciliary muscle by diminishing the necessity for excessive accommodative efforts, whilst in myopia suitable glasses relieve the necessity for extreme convergence. In astigmatism, the constant effort to obtain distinct vision is particularly irksome, probably because it induces an irregular action of the ciliary muscle, a structure which nature has designed to act uniformly in all its extent, and which, on account of its delicate functions, is endowed with numerous and extraordinary sensitive nerves. In astigmatism, then, we have to deal with accommodative asthenopia. But when the extrinsic muscles are at fault, the difficulties caused by otherwise uncomplicated errors of refraction cannot always be remedied by glasses that correct the refractive error. There can be no doubt that defects in the extrinsic muscles are met with much more frequently in connection with errors of refraction than in the normal eye, and it is sometimes found that a suitable correction of the refractory error will in time restore muscular equilibrium where this has been defective. Correcting glasses can often be supplemented in their action by combination with prisms in such a position as to relieve the strain of overworked muscles. Combinations of this sort may have the happiest effect in allaying the visual disabilities of those who suffer from both refractory and muscular errors. There are, however, cases in which a defective action on the part of the extrinsic muscles is the sole cause of the visual difficulty, but I am convinced that a large proportion of those cases in which a careful correction of the refractive error affords little or no relief to the symptoms of eye-strain, can be explained by the presence of some defect in the action of the extrinsic muscles, either inherent or the result of long habit—a defect which must be corrected before relief can be obtained by wearing glasses. The following case illustrates this point:

Mrs. S., aged 37, consulted me in the year 1883 on account of short sight, weak vision, and almost constant headache, troubles which dated back to girlhood, and from which she had never been able to find relief. She was wearing concave spherical glasses for distance only, of 16 inches focus. Under atropine, I found M 1/14, with myopic astigmatism about 1/60, vision $= \frac{8}{10}$ each, and apparently some weakness of the internal recti, but, as I thought, not enough to call for special attention (at that time I was not in the habit of testing the muscular functions in doubtful cases with the same care as I do now), I ordered—18 to be worn constantly if possible. Three and a half years later—that is, last April—she came to me again complaining that the eyes and head were, if possible, worse than ever. I then found the refraction, corrected under atropine: R., $-4.50 \frown -0.50$; ax. 70°; vision $\frac{8}{10}$. L., $-4.50 \frown -0.75$; ax. 100°; vision $\frac{8}{10}$. With this correc-

tion there was a latent divergence at 6 metres distance, =pr. 6°, abduction =15°, adduction the same. Abduction increased by exercise to 18° and adduction to 25°. Though varying slightly from day to day, repeated examinations substantially confirmed these conditions. There was thus an evident loss of muscular balance in favor of the external recti. This I corrected by a partial tenotomy of the left external rectus carefully regulated to exactly correct the latent divergence. She was directed to continue using the same glasses as before. A month later she came to report the result. There was then perfect muscular balance at 6 metres, abduction 12, adduction 30. From the day of the operation the headache had entirely disappeared.

Insufficiency of the external recti with latent convergence has lately also become a well recognized condition as a cause of asthenopia and its attendant discomforts. This condition is perhaps of less frequent occurrence than the same defect in the internal straight muscles. When discovered, however, it may, if necessary, be remedied by taking from the internal recti their overplus of power, or the relative strength of the externi may be augmented by a carefully regulated advancement of the tendon.

I now come to what I believe will prove to be one of the most important muscular anomalies, for the detection of which and a precise knowledge of the proper measures for its relief we are mainly, if not entirely, indebted to Dr. Geo. T. Stevens, of New York. I allude to defective action of the superior and inferior recti. I have recently found this defect to be of more frequent occurrence than I should have anticipated, and it is of extreme importance, not only on account of the visual and other (reflex) disturbances an error of this kind is capable of inducing, but also in its influence on the action of the other ocular muscles. I now consider no test of the muscular functions to be complete unless the condition of the superior and inferior recti is carefully taken into account, because a latent vertical deviation so disturbs the balance of the other muscles that the most misleading results are likely to be obtained if a vertical deviation has been overlooked. The terms suggested by Dr. Stevens to express the various abnormal conditions of the extrinsic ocular muscles seem to me entirely satisfactory, and I now always employ them in my records. Vertical deviation or *hyperphoria* may be combined with any error of refraction, and with lateral deviation in either direction, such as the following case, which is one of compound hyperopic astigmatism, with hyperphoria and exophoria :—

Mrs. F., aged 36, a thin, worn-looking woman, has had pain in the eyes and headache for many years, always aggravated by near work. In Dec., 1883, I found under atropine—

R., + 32 s. ⌒ —80 c., ax. 135°, $\frac{20}{30}$.

L., + 40 s. ⌒ + 14 c., ax. 130°, $\frac{20}{40}$.

and ordered these for all near work. They afforded some relief, but the headaches remained as before. She came again in April, 1887, and I found the refraction unchanged. After repeated examinations I found 1° of right hyperphoria and 2° of exophoria, abduction=9°, adduction=16°. After partial tenotomy of left lower rectus, the hyperphoria was corrected, but the lateral deviation remained unaltered. This was also corrected by partial tenotomy of right external rectus. On June 14th there was exophoria 1°, abduction 6°, adduction 23°, and freedom from headache. On June 25th there was exophoria =2° and some headache after prolonged use of the eyes. The remaining exophoria will probably reqnire a repetition of the tenotomy. There is evidently still a considerable degree of latent excess of strength in the externi.

In another case, a gentleman 45 years of age, there was: R.H., =0.75 $\frac{20}{30}$. L.H.,=4 D ⌒ +2 D.C., ax. 110, $\frac{20}{30}$+. With frequent headache and the head feeling so badly he was in great anxiety, fearing the head symptoms indicated organic disease of the brain. Here the correction of $1\frac{1}{2}$° right hyperphoria by partial division of the left inferior rectus and the correction of the error of refraction by glasses, relieved the head completely.

The same error of muscular balance will undoubtedly cause distressing symptoms where there is no error of refraction or one so slight that it will not account for the symptoms. I have recently seen a marked instance of this kind, and will here give another in which the error of refraction was trivial, but the patient a great sufferer from headache and weak vision ; he also had a worn, distressed look which one often meets with in cases of eye-strain.

C. A., aged 29, has had weak vision since his

school-days, and suffered almost constantly from headache. In 1880 I treated him for an anterior choroiditis of the left eye, from which he made a perfect recovery, but I did not succeed in relieving the asthenopia. Last June I again had an opportunity to examine the eyes, and found, under atropine: R. +0.75 s. $\frac{1}{18}$. L. +0.75 s. ⌒ 0.75 c., 90° $\frac{1}{18}$. There was slight insufficiency of the internal recti, with exophoria 1° and left hyperphoria 1°. A correction of the latter gave immediate freedom from headache, and was soon followed by a marked improvement in his general health.

There can be no doubt that visual imperfections which call for a constant and abnormal expenditure of nerve force, such as must necessarily be the case where there is loss of equilibrium, or of the visual axes in any direction, is not only a frequent cause of morbid conditions in the eyes themselves, such as conjunctivitis, blepharitis and keratitis, perhaps, too, of deeper seated inflammatory affections of these organs, but also of headache, migraine, neuralgia and other nervous disorders. That they cause deterioration in the general health almost goes without saying.

Every subject of such visual defects as these is handicapped or over-weighted to just such an extent that he is liable to break down before the finish. In the cases I have quoted I have not, for obvious reasons, gone fully into details, but enough has been said to show their bearing on a subject which seems to me to merit more attention than hitherto has been bestowed upon it, even by those who have to do exclusively with ophthalmic surgery; and, I am convinced, the facts I have endeavored to bring forward may be used as a key to unlock the hidden secret of many obscure and troublesome cases that would otherwise stand as an opprobrium to medical art, bidding defiance to all its resources.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE,

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

SECTION OF THE SPLANCHNICS.

In a "demonstration of the vasomotor functions of the splanchnic nerves," the chief editor of the "Hand-book for the Physiological Laboratory" (*a*), informs his readers that these nerves contain vasomotor fibres which "are distributed to the arteries of the abdominal viscera."

We approach this "demonstration" expecting to find that when these nerves are cut the predicted results will follow in the arteries they supply being more or less "relaxed" or "dilated." What is our disappointment to find in all that follows in this chapter of the "Hand-book," the arteries are never once alluded to! Thus the very pith and point of the so-called "demonstration" is entirely ignored! What occurs is thus stated by Dr. Burdon Sanderson: "After section of both nerves the vessels of all the abdominal viscera are seen to be dilated. What "vessels" are these? Not the arteries, because Dr. B. S. continues: "*The portal system is filled with blood;* the small vessels of the mesentery and those which ramify on the surface of the intestine are beautifully injected; the vessels of the kidney are dilated, and the parenchyma is hyperemic; all of which facts indicate, not merely that by the relaxation of the abdominal blood-vessels, a large proportion of the resistance to the heart is annulled, but that *a quantity of blood is, so to speak, transferred into the portal system, and thereby as completely discharged from the systemic circulation as if a great internal hemorrhage had taken place.*" (*b.*) [Italics mine.] It needs no italics to give point and force to this remarkable admission. It is merely stating, with a little circumlocution, that the arteries are empty and the veins are full! The "beautiful injected vessels," which the learned editor so much admired, are not arteries but veins, the blood in which has become "bright red, like arterial blood," as Prof. Kuss explains of venous blood in the mesentery, because oxygenation has been effected simply by exposure to the air." (*c*)

The contraction and emptiness of the arteries, after section of the vasomotor nerves, is thus proved on the very highest authority. Where now is the justification of the assertion that after a section of this kind the arteries are dilated and hyperæmic?

Whatever obscurity there might be as to the actual results of section of the cervical sympathetic, for obvious reasons, there can be no mistake

* Read before the Physiological Section of the Ninth International Medical Congress, held in Washington, September, 1887.

(*a & b*) Amer. Ed., p. 258, p. 260.
(*c*) Lec. Phys., p. 326.

as to the results here. Now the law of uniformity of cause and effect, demands that what is true of the relative state of the arteries and veins after section of the splanchnics, must be true also after section of the cervical sympathetic—and since the arteries are thus shown to be empty and the veins full in the former case, the same condition must be held to prevail also in the latter. It is worthy of note, in this connection, that both after section of the spinal cord, and after section of the splanchnics, blood pressure falls, and in both cases may be restored by faradization of the divided cord or nerve. It is evident from this, that the fall of blood pressure (as shown by the kymograph in the carotid) on section of the cord, is not to be regarded as an indication of arterial relaxation, as appears to have been done; because blood pressure fell also after section of the splanchnics, where we know positively that arterial dilation could not have taken place. It may be asked, how could faradization of the spinal cord or of the nerve, restore the pressure or tension in the arteries, if the heart and arterial system were already empty? Dr. Burdon Sanderson supplies the answer indirectly, in stating: "It is seen that after section of the cord the heart is flaccid and empty, and that its cavities fill and its action becomes vigorous, when the vascular contraction caused by excitation of the peripheral end [of the cut cord] forces the blood forward so as to fill the right auricle" (*a*). Now the only blood which could be "forced forward so as to fill the right auricle" is *venous* blood from the distended portal system. Thus it will be seen that all the facts fit, and as it were, dovetail into each other, in establishing that nervous paralysis and contraction of the arterial muscle go together the result being hypermeia, not of the arteries but of the veins. The explanation just quoted from the Hand-book, as to the forcing forward of the venous blood, as an effect of the faradic current, confirms the explanation made above, as to the dissipation of the venous hyperemia by the same current after section of the cervical sympathetic.

STATE OF THE ARTERIES IN DEATH.

Not only are the arteries invariably as empty as their physical structure will permit them to be, when their nerves are cut or paralyzed in the living body, but such is also their condition *in death* of the body, when nerve force is extinct. This is a fact too well known to need any special proof. It is a fact, however, which ought to be explained by those who hold that in a condition of nerve paralysis the arteries are "dilated" and hyperemic.

THE OPERATION OF PITHING.

What has just been said of the contracted and empty state of the arteries is true also after the operation of "pithing" (in which the medulla and spinal cord are destroyed); as any one can easily satisfy himself, as I have done, by actual experiment. This is inadvertently proved to be the case by Dr. Burdon Sanderson in his account of an experiment designed to prove the contrary. Two frogs are taken. One is "pithed," in the other the nervous centres are uninjured. In both the heart is carefully exposed and the single ventricle slit open, so as to show the state of the great vessels. The experiment is intended to prove that in the pithed frog the arteries are "relaxed" and full of blood. On Dr. Burdon Sanderson's showing, the results are these: In the pithed frog, "although the heart is beating with perfect regularity and unaltered frequency, it is empty, and in consequence, instead of projecting from the opening in the anterior wall of the chest, it is withdrawn upwards and backwards towards the esophagus." The heart and its appendages "are alike deprived of blood"; but on opening "the rest of the visceral cavity, "*the intestinal veins are distended.*" In these, "the whole mass of blood has come to rest, *out of reach of the influence of the heart.*" How significant is this! If the arteries were dilated, and consequently full of blood, this blood could not be said to be "out of reach of the influence of the heart." But this is not all. The Hand-book continues: "In the frog deprived o its central nervous system *only a few drops of blood escape*—the quantity, that is to say, previously contained in the heart and in the beginning of the arterial system. In the other, *bleeding is not only more abundant but continues for several minutes after the section.*" [Italics mine.]

Is it not evident that in the case of the pithed frog, the arterial system promptly emptied itself into the now "distended veins," and had "only a few drops of blood" left to drain away through the open ventricle (the frogs being both suspended), while in the case of the other frog, whose nervous

(*a*) Lec. Phys. p. 251.

system was intact, this arterial contraction did not take place, and the arteries continued to bleed for several minutes till drained of blood.

The "Hand-book for the Physiological Laboratory," from which I have quoted so often, occupies to-day a leading place as an exponent of physiological science. The reader who studies the details of the experiment just quoted, will be surprised to find, that here again, in an experiment specially designed to prove that "all the arteries are relaxed," the condition of the arteries is completely ignored, and never once alluded to! The arteries *ought* to be "relaxed," "dilated," and even "widely dilated" here, on the theory of the text-books, but they are empty and contracted, their final act being, as in death from other causes, "to drive their contents into the veins" (*a*).

AN EXPERIMENT OF DR. BROWN-SEQUARD.

In this connection I must notice in the briefest manner, an experiment of Dr. Brown-Sequard in which the doctrine here supported is confirmed in a remarkable manner. In a dog, a section was made of a lateral half of the spinal cord just below the medulla. The result was, extreme hyperemia of the "blood-vessels," to use Brown-Sequard's term, of one posterior limb, while the "blood-vessels" of the other posterior limb displayed a state of spasm and ischemia quite as extreme. "Very often the spasms persists for days," wrote the observer, "and it may be so great that the circulation is almost entirely suspended," so that "the cutting of the skin hardly gives a drop of blood." The question at once arose, was the paucity of blood in one limb due to the excess of blood circulating in the other, or *vice versa?* Was the spasm on one side, or the dilatation on the other, the primary or direct effect, through the spinal vasomotor nerves of the half section of the cord?

In order to solve this question, Dr. Brown-Sequard made "direct experiments." Among others he ligatured the iliac artery feeding the dilated blood-vessels of the hyperemic limb, thus directing "almost the whole of the blood coming from the aorta" into the iliac artery of the limb in which the circulation was so much diminished. Notwithstanding this, the spasm was but partially overcome: "the temperature rose but little"; and "it was quite evident the small arteries near the toes did not allow the blood to pass freely." Here was complete evidence, not only that there was spasm, but also that this spasm was arterial. Although the vasomotor mechanism of the spinal cord is as yet only very imperfectly understood, there seems no reason to doubt that this active contraction of the arterial muscle was here, as elsewhere, due to nervous paralysis, the result of the half section of the spinal cord.

MORE ABOUT THE ARTERIAL MUSCLES.

It will be obvious that the relative state of the arteries and veins in the foregoing experiments is incompatible with what M. Charcot calls "the paralytic dilatation" of the arteries, as a result of vasomotor nerve section, and could not occur, if after this section the arteries remained "widely dilated," and "permanently larger," as asserted by other authorities already quoted. If this were the condition of the arteries, it is evident that they would be wholly incapable of contracting upon their contained blood, so as to force it forwards through the capillaries and into the veins;—an act depending entirely upon arterial contraction, because the force of the heart has already expended itself, and the capillaries have no muscular walls; while, that the veins are merely passive, is shown by the fact they have no vasomotor nerves, and their calibre is not, as in the case of the arteries, regulated by nerve influence (*b*). Thus all the facts show that the arteries, so far from being "dilated" and "paralyzed," are undergoing active contraction. Some recent authorities appear to suggest the modified idea that the dilation of the arteries, instead of being "permanent," as alleged by some authorities, is a temporary effect—"an opening of the flood-gates," so to speak, in order to facilitate the transmission of blood to the veins. Thus Dr. M. Foster writes: "The section of the splanchnic nerves causes the mesenteric and other abdominal arteries to dilate, and these being very numerous, a large amount of the peripheral resistance is taken away and the blood pressure falls accordingly; a large increase of flow into the portal veins takes place and the supply of blood to the face, arms, and legs, is proportionately diminished." (*c*) It would appear that here, as elsewhere, "the fall of blood pressure" is reparded as evidence of "lessened peripheral resistance," and a

(*a*) Kuss Phys., p. 181.

(*b*) Foster's Phys, pp. 265-268.

(*c*) Phys., 3rd Amer Ed., pp. 240 and 220.

proof that the arteries are "dilated," the fallacy of which will presently appear.

We read again: "When the nervous system is destroyed, dilation of the splanchnic vascular area causes all the blood to remain stagnant in the portal vessels; and probably these as well as other veins are rendered unusually lax, so that the blood is largely retained in the venous system, and very little reaches the heart." (*a*) And further: "When in the frog, the brain and spinal system are destroyed, very little blood comes back to the heart, as compared with the normal supply, and the heart in consequence appears almost bloodless and beats feebly . . . . the veins become abnormally distended and a large quantity of blood becomes lodged and hidden as it were in them." (*b*) Here is the secret, both of the emptying of the arteries and of the fall of blood pressure. The blood comes to rest in the more capacious venous system (*c*) "out of reach of the influence of the heart." Now seeing that the rapidity of the arterial circulation is such that only one-seventh of a second is required for blood to pass from the heart to the radial pulse, how long, think you, would be required to empty the arterial system of the pithed frog, seeing that at first little blood, and very soon no blood, finds its way back through the heart, into the arterial trunks? Why, the the time required would be counted by seconds rather than by minutes. There would be no time and no necessity for the terminal arteries to dilate; the emptying of the arteries and the fall of blood pressure being amply accounted for by the fact that *blood is passing out of the arterial system faster than it is being returned to it.* A precisely similar condition to that just described as resulting from nerve destruction, occurs also in the fatal stage of asphyxia. Here, too, the arteries are "contracted" and empty, and the large veins are so distended that "if cut into they spirt like arteries."(*d*) And here also, Dr. M. Foster tells us there is a fall of blood pressure in the midst of general arterial contraction. He says: "On account of the increasing slowness and feebleness of the heart, the blood pressure, in spite of the continued arterial contraction, begins to fall; since less and less blood is pumped into the arterial system." (*e*) It will be seen that the parallel between the two cases is complete, and that the plain facts as given by the highest authorities, do away completely with the assumption that, here, the fall of blood pressure is to be regarded as a proof of arterial relaxation. Even in the slower forms of death, when the process of emptying the arteries, is more gradual, there is still no evidence of, and no necessity for, a dilation of the terminal arteries to give exit to the blood; for, granting that contraction of the terminal arteries would tend to hinder the outflow of blood, this effect would be counteracted by stronger contraction of the larger arterial trunks above, forcing the blood through and out of the numberless terminal branches ending in the capillaries.

The facts thus far presented refer only to the great vasomotor areas of the cervical sympathetic and splanchnics. It seems unnecessary to attempt to discuss the lesser and local vascular mechanisms, about which little is known, and that little comes to us under the ægis of an erroneous theory. The greater always includes the less. What happens when the life of the chief nervous centres is killed either by sudden and intended destruction, or in death from ordinary causes, happens also in a more limited area when local or subordinate centres are killed or paralyzed. Since in the former case the arteries are found contracted and empty, the same rule must be held to hold good in the case of the individual nerve and artery.

THE STIMULATION (?) OF ASPHYXIA.

Is it not a strange position to put forward in the name of medical science, that an animal dying of asphyxia is actually undergoing a high degree of nervous excitation? Yet such is actually the teaching of the text-books in physiology to-day! Dr. Burdon Sanderson, treating of aspyhxia, says: "One of the effects of diminishing the proportion of oxygen in the blood is to excite the vasomotor centre, and thus to determine general contraction of the small arteries. The immediate consequences of this contraction is to fill the venous system." As the process advances "the heart's contractions become more and more ineffectual till they finally cease, leaving the arteries empty and the veins distended."(*f*) There is no mention here of arterial relaxation or dilation, to facilitate the outflow of

(*a*) Phys, 3rd Amer Ed., p. 367.
(*b*) Ib., pp. 240 and 220. (*c*) Ib., p. 154.
(*d*) Dr. Burdon Sanderson, Hand-book, etc., p. 332.
(*e*) Phys., p. 445. (*f*) Hand-book, etc., p. 333.

blood. On the contrary "the immediate consequences" of "a general contraction of the small arteries" is "to fill the venous system," and in a few minutes "the arteries are empty and the veins dilated," the animal being dead. This is precisely the condition which we have seen in a former page, to be the direct result of destruction of the nervous centres. It is a process which invariably prevails in the dying, and is complete in death. Thus according to Paul Bert quoted by Prof Kuss, "death is always owing to asphyxia" (*a*).

Why has it been assumed by physiologists that in this rapid sinking into death, the nervous centres are undergoing an unusual excitation? Because as we have just seen, there is "a general contraction of the small arteries," and other spasms and contractions of the respiratory muscles fixing the chest and arresting respiration; and in accordance with the theory of the day, these spasms and contractions of the muscles, depend on active discharges of nerve force, stimulating the muscles to contract. How is this assumed extraordinary activity of the nerve centres to be accounted for in an animal actually dying? There is a "physiological law" which declares that the activity of an organ is directly dependent upon its receiving a due supply of arterialized blood (*b*) and Dr. W. B. Carpenter has said of venous blood, that "it exerts a depressing influence upon the nervous centres," from which they are at length "completely paralyzed." (*c*) One would have imagined that bad blood, deficient in oxygen and loaded with carbonic acid, would have been the very last thing which a physiologist would have chosen as a pabulum from which to generate an excess of nerve force! and doubtless the choice was embarrassing enough. But necessity compels. The exigency of the theory is inexorable. Muscular contraction without nervous stimulation is deemed impossible, and there being nothing else to fall back upon, it has been assumed that impure, non-arterialized blood plays the part of a stimulant to the nervous centres. Accordingly we find a recent and popular writer—Dr. J. Milner Fothergill—in his "Antagonism of Therapeutic Agents," declaring that "the more venous the blood the greater the activity of the respiratory centre. The effect of venous blood is to augment the natural explosive decomposition of the nerve cells. . . . The effect of defective arterialization causes more rapid as well as deeper breathing; more perfect and extensive respiration is set up until properly oxygenated blood is procured." This author would almost lead one to believe that a kindness was done to the rabbit in having its vagi cut. He says, "When the vagi are cut, the respiration is modified; it becomes deeper and more prolonged, fuller and more complete." (*d*) But unfortunately this view of an apparently improved respiration is wholly delusive; for, as Dr. Burdon Sanderson tells us, "notwithstanding the vigor of the respiratory movements, the blood becomes more or less venous,"—the animal is dying, and does die, "commonly before the end of the first day" (*e*).

Let it be kept in view that the theory of the day explicitly teaches that "the muscles receive from the nervous system a preternatural stimulus to action" (*f*) and that spasm and convulsion "are dependent upon excessive activity of the spinal centres:" (*g*) and we shall see presently to what apparent absurdity this doctrine has led. In one of Kussmaul and Tenner's experiments, the carotid arteries are ligatured with the effect of inducing "immediate loss of consciousness and general and violent convulsions," which are promptly recovered from, and nervous control over the muscles restored, as soon as the ligatures are united and blood is admitted to the brain. Dr. M. Foster's view of this experiment is, that here "the nervous centres being no longer furnished with fresh blood, become rapidly asphyxiated through lack of oxygen." And yet strangely enough he holds that in this almost fatal condition of "rapid asphyxiation," the nervous centres are undergoing stimulation! for he adds: "similar anemic" convulsions are seen after sudden and large loss of blood from the body at large; the medulla being stimulated by the lack of arterial blood." (*h*) Surely such a view as this may be gravely challenged, even when put forward on high physiological authority! Dr. M. Foster remarks in another page, in his chapter on "Death," that "blood is not only useless but injurious unless it be duly oxygenated" (*i*). And again he says

(*a*) Phys., p. 330.
(*b*) Dr. C. B. Radcliffe. (*c*) Hum. Phys., p. 537.
(*d*) P. 88. (*e*) Hand-book, p. 317.
(*f*) Dr. Pereira. Vol. 2, p. 541.
(*g*) Dr. W. B. Carpenter, Ib., p. 845.
(*h*) Phys., p. 441. (*i*) P. 833.

of venous blood that if it "continues to be driven through a muscle, the irritability of the muscle is lost even more rapidly than in the entire absence of blood. It would seem that venous blood is more injurious than none at all"(*a*). Why should nerve function be augmented by what is useless and injurious, not only to muscle, but to every other tissue in the body?

(*To be Continued*).

Correspondence.

OUR NEW YORK LETTER.

(*From Our Own Correspondent.*)

WORK AT THE POLYCLINIC—DR. R. C. M. PAGE, ON DISEASES OF THE CHEST—TREATMENT OF COMMON SKIN DISEASES.

Treatment and diagnosis may be said to be the two great things in medical practice, and these are well taught in Dr. R. C. M. Page's clinic, at the Polyclinic, who always shows many interesting chest cases. He relies on the rales for the diagnosis of bronchitis, and states, that although in some cases there may be change in the fremitus, this is due to the tumefaction of the bronchi and consequent interruption of the transmission of the voice sounds. An explanation new to me, of why there should be in the normal chest a difference in the intensity of the voice sounds, greatest on the right side, was that the right bronchus being the larger, the voice sounds are more readily transmitted. This is a point which may have important practical bearing on the recognition of early phthisis, which, of course, usually affects the left apex. Speaking of bronchitis, reminds me of several bad cases of chronic bronchitis in which the cough was troublesome, being almost wholly and immediately relieved by ℥ss to ℥j of *syrup* of ipecac. Another very favorable prescription here for old coughs and one which does great good, is the so-called Stokes' Expectorant. Its composition is as follows:

R.	Ammon Carb., ...	grs. xvj.
	Ext. Senegæ. Fld.	
	" " Scillæ, ...	āā ℥ss.
	Tincturæ Opii Camph. . .	℥ij.
	Syr. tolu, ...	ad ℥ij.
Sig.	℥j. p. r. n.	

(*a*) Phys. p. 126.

Judging from the every day out-patients, irregularity of the heart's beat appears to be more or less endemic. The causes as taught here are about as follows:

1. *Centric Causes*—

Chorea, epilepsy, hysteria, cerebral and spinal irritation.

2. *Execentric Causes*—

All forms of gastro intestinal irritation; certain articles of diet, tobacco, alcohol, opium, coffee, etc., genito-urinary disturbances.

3. *Mechanical Causes*—

Tight-lacing, displacements of heart from any cause, emphysema.

4. *Blood Changes*—

Bright's disease, gout and rheumatism.

5. *Fatty Degeneration.*

It is contended that the younger the patient is when suffering from acute articular rheumatism the more prone is he to suffer from acute endocarditis, whilst those who are subject to acute articalar rheumatism late in life, rarely have the complicatory endocardial trouble.

For irregularity of the heart's-beat such as I speak of, little else is done than to regulate the diet and use some local anodyne, as emplastrum belladonnæ.

In the diagnosis of heart complications, great stress is lain upon the association of cardiac dropsy and tricuspid murmurs.

Skin diseases are always plentiful in New York. Eczema is treated here by the soft-soap application, and some form of simple ointment, often the oxide of zinc. In tineæ of all kinds strong solutions of chrysophanic acid are employed, and a common practice is to coat the patch, when nearly well, with a solution of gutta percha and chloroform, which is claimed to lessen the tendency to irritation and prevents a chronic eczematous patch from occupying the seat of the tineæ. Syphilitic ozœna is treated here by simply douching with warm water, and appears to do as well and better under such simple applications than when more irritating ones are used.

DRUGS.

Editor CANADA LANCET.

Not long since, an agent of a well-known drug firm, which claims to deal exclusively with physicians, called on me. As his drugs were considered

cheaper than what I was getting from the wholesale establishment with which I had for many years been dealing, I gave him a fine order, for orders over a specified amount were sent at expense of the firm. I was pleased with the goods and their apparent cheapness, but on inquiry of my village druggist, I find that he buys far more cheaply than I ; he pays 98c. per lb. for fl. ext. cascara sagrada, while I pay this drug firm which deals with physicians only, $1.35 for the same. While I pay $2.90 for 1,000 of Bland's pills, my village druggist pays $1.25 per lb., ordered as the fl. ext. cas. sag. is from a Montreal firm. The only plan for us to adopt in the matter of such business, is to keep a constant watch on our druggists, who, unless one finds out by mere accident the price of drugs, will in every case be the loser. Yours,

December 23, 1887. SYNTAX.

Reports of Societies.

BRANT CO. MEDICAL ASSOCIATION.

BRANTFORD, DEC. 7TH, 1887.

The President, Dr. Thompson in the chair.

After routine business Dr. Burt gave some points in the history of a case of carcinoma of the breast. The patient was of delicate constitution, aged 67 years, giving a cancerous family history, her mother and sister having suffered from the disease.

He removed the breast, assisted by Drs. Philip and Sutherland. Several axillary glands, some of them very large, were also removed. A few cervical glands were enlarged, the enlargement being probably due to irritation, as they had decreased somewhat in size since the operation. The sponges, instruments, etc., used in the operation, were soaked in a carbolic acid solution, and the wound had healed by first intention.

Several of the members present discussed the removal of cancers, touching on the means to be employed; indications for and against removals ; repeated removals, and the question of prolongation or shortening of life by such operation. With regard to the latter point, the feeling of the members was that life was made much more pleasant, and was prolonged by operation in most cases. Dr. Griffin spoke of a case in which repeated operations had been performed, the patient getting a new lease of life with each operation. Dr. Philip assisted at the removal of a breast, which was shown to be cancerous by the microscope, in which the disease had failed to return after a period of seven years. Dr. A. J. Henwood and Dr. Secord were appointed to provide notes for the next meeting, which should form a ground work for discussion.

Selected Articles.

RHEUMATISM.

BY JULIUS POLLOCK, M.D., F.R.C.P., LOND.

Let me now pass to the subject of my lecture. I have certain drawbacks to contend against to-day, which I do not allude to by way of complaint, but that you may know I have not overlooked them. In the first place, there is little or nothing new to tell you about rheumatism. No fresh light has been shed upon its pathology or treatment during the last few years, and I fear lest what I have to say to you may be "as tedious as a twice-told tale." Then again, I am badly off in the matter of illustration. My subject is one that does not carry specimens or diagrams. Nor are we able at will to command the presence of a certain number of cases of rheumatic fever in the wards. At the present time there is but one, and he is convalescent. Such are my difficulties, and I am sure you will bear kindly with me. But to proceed. There are two forms of rheumatism, the articular and the muscular ; and although they both are known under the common term "rheumatism," they are really, I believe, two separate and distinct disorders, with but little in common except their name. Articular rheumatism, as its name implies, is essentially an affection of the joints, very frequently associated with inflammation of the pericardium, endocardium, and other serous membranes, the structure of which so closely resembles the synovial. There is usually fever and marked constitutional disturbance. The disease, when uninfluenced by remedies, pursues a tolerably definite course, and has a strong tendency to wear itself out in time—say "six weeks," according to the first Dr. Warren. Its main features are those of an acute febrile attack, with local lesions. Muscular rheumatism, on the other hand, is a much more indefinite complaint, affecting the muscles, aponeuroses, and other fibrous structures, rarely accompanied by fever, never implicating the heart, and of very uncertain duration. Both these forms of rheumatism are full of interest, and will repay careful study ; but either is a large subject, and it would be impossible to do justice to the two diseases in one lecture, so I propose, if

you will allow me, to confine my attention this afternoon entirely to the articular form, which from its greater pathological importance may well claim precedence. This disorder occurs in three well-marked forms—the acute, the subacute, and the chronic. The first two are often spoken of as "rheumatic fever," and I shall not scruple to avail myself of the term to avoid tautology. Perhaps the subacute form, in wnich the temperature ranges from 99° to 102° F., is that most commonly seen, especially in hospital practice. It differs from the more acute variety simply in degree; all the symptoms are less severe, a fewer number of joints are implicated, and perhaps there is less chance of cardiac mischief. But it is quite as tedious as the acute form, and relapses are not uncommon. In chronic articular rheumatism there is generally no pyrexia, and I believe it is not unfrequently confounded with other kinds of joint disease. It is recognized without difficulty by the number of joints that are affected at the same time, and by the wonderful influence that salicylate of soda exercises over it. I call to mind one case of this chronic form, which came under my notice in the very early days of that salicylate of soda, and in which for nearly a month I tried every remedy for rheumatism that I could think of; at last I used the salicylate of soda and cured my patient in two days.

I propose to pass lightly over the ordinary phenomena of an attack of rheumatic fever, which are probably as familiar to most of you as they are to me; the symptoms of having "taken cold," the more or less pyrexia, the profuse and acrid sweat, the swollen, painful, and tender joints, the occasional metastasis, and the not infrequent implication of the heart, which latter complication, if it be a complication, and not, as some German authorities have held, the very essence of the disorder, are the more likely to occur in inverse ratio to the age of the patient. But there is a remarkable condition that sometimes arises during the course of an attack of articular rheumatism, to which I desire especially to call your attention. I allude to what is known by the name of "hyperpyrexia." Now this state of high fever is not unknown in other diseases; it occasionally accompanies typhoid and scaret fever; it is the very essence of *coup-de-soleil* or sunstroke, and is met with in various diseases of the nervous system; "but it is in connection with acute rheumatism that it has attracted most attention and is most frequently encountered. Curiously enough, it is not only the more severe attacks of the disease that drift into hyperpyrexia; comparatively mild and subacute cases, which appear to be doing well; will now and then take this remarkable course. The symptoms of hyperpyrexia are very characteristic and well marked. The temperature which in ordinary cases of rheumatic fever ranges from 100° to 103°F., or thereabouts, without any apparent reason begins to rise, and may ultimately attain the height of 110° or even more; at the same time the joint affection subsides, pain is no longer complained of, and the patient often expresses himself as better just as the most serious symptoms are coming on. In most ceases, but not invariably, the profuse sweating cases; the skin becomes dry, harsh, and intensely hot to the touch; very frequently a crop of sudamina breaks out upon the neck, chest, and abdomen (which latter symptom I have learned to look upon as a very unfavorable sign); the tongue becomes dry and brown; there is great thirst, with complete loss of appetite; the breathing is rapid, the pulse very quick and generally weak; the patient is tremulous and restless, with a suffused and 'ferrety' appearance about the eyes, delirious at night, but often fairly sensible in the daytime. The delirium is generally of a low, muttering kind, not unlike that of delirium tremens, though occasionally there is some excitement. Unless the disease takes a favorable turn, or relief can speedily be given, death ensues in a day or two, apparently from mere hyperpyrexia."

The occurrence of hyperpyrexia would appear to depend upon the nervous systsm being attacked by the rheumatic poison; at least this was the view that I took of it ten years ago, and which has since been abundantly confirmed. Dr. Maclagan says: "Admitting the existence of a thermic centre, whose function it is to control heat formation and prevent undue rise of temperature, we have no difficulty in certain maladies and injuries in attributing the increased body heat to interference with the function. The temperature rises because the reins are slackened. The sequence of events seems to admit of no other explanation. Carrying out this line of argument, we cannot fail to see, not only that the rise of temperature thus induced must be directly as the extent to which heat inhibition is impaired, but that paralysis of the thermic centre, by abolishing inhibition and leaving heat production in uncontrolled possession of the field, must lead to hyperpyrexia. And the more we consider the pathogenesis of febrile heat, the more apparent does it become that impairment of inhibition is a much more likely cause of hyperpyrexia than is direct stimulation of heat production. Heat inhibition remaining unimpaired, tissue metabolism could scarcely cause those very high temperatures which characterize some cases of hyperpyrexia. Heat inhibition being paralysed, there is no difficulty in seeing that the temperature cannot fail to rise, and to go on rising, so long as tissue metabolism and heat production continue. All cases of hyperpyrexia we therefore regard as being probably of neurotic origin—as due to some cause which exercises a paralysing influence on the thermic centre. Pyrexia may result either from

increased production or defective inhibition, but marked hyperpyrexia is probably due only to defective inhibition. In the cases hitherto instanced there has been a direct lesion of the nervous centres to explain the paralysis of the thermic centre and the consequent rise of temperature. Other cases there are, however, in which the evidence of paralysis of that centre is equally well marked, in which hyperpyrexia is pronounced, but in which the sequence of events by which it is brought about is not so apparent.'

Now what is the etiology—what are the causes of rheumatic fever? These may, very properly I think, be divided into two—"predisposing" and "exciting." This part of my subject has given rise to much speculation and conjecture, and various theories as to the pathology of acute rheumatism have been broached. Is there a special poison, and if so is it introduced from without, as in the case of small-pox, typhoid fever, or ague? or is it manufactured within the body, as in gout or uræmia? Dr. Maclagan has advocated the view that the poison of rheumatic fever is malarious in origin, and although I cannot agree with this, it was a very "happy thought," for it led him to try salicin in the treatment of the disease, and was the means ultimately of introducing the use of salicylate of soda, the value of which is now universally acknowledged. By some authorities the "germ" theory has been entertained, and Professor Pel, of Amsterdam, thinks that "it only wants the discovery of the specific micro-organic cause of the disease in the inflamed serous membranes to render the present presumption of its specific origin a certainty." But I do not "cotton" (to use a homely phrase) to the theory that the poison of acute rheumatism is introduced from without. All evidence appears to me to point to the conclusion that it is manufactured *within* the body. This has been clearly proved to be the case in gout by Sir Alfred Garrod: and Dr. Lauder Brunton has called attention to certain remarkable poisons that are formed during the peptonising of proteids within the living body, which suggests the possibility, to say the least of it, of the *materies morbi* of rheumatic fever being formed during the process of digestion or metabolism. Whether it may be lactic acid, an old idea recently revived by Dr Fagge, or any other kind of acid, I cannot say. We know that a profuse and acrid sweat accompanies the disorder, and looks like an effort of nature to eliminate the poison; but we also know that no amount of alkalies will neutralise the mischief. Unsatisfactory as it may be, we must, I think, admit that the particular substance, the presence of which in the blood predisposes to an attack of acute rheumatism has yet to be discovered.

The liability to rheumatic fever is not the same at all ages. It is amongst the young that the disease is most prevalent, though mere infants do not seem to suffer. Perhaps the most common time of life for an attack is between the ages of ten and thirty, though it may occur in younger and older persons. It is very unusual to meet with a first attack of articular rheumatism after fifty years of age, and even those who have had the disorder ultimately outlive their liability to be attacked by it. Youth, then, must be reckoned as among the predisposing causes of acute rheumatism. A previous attack has been also supposed to increase the liability to the disorder, but about this there is some doubt. The very fact that in course of time the tendency to the complaint is lost would seem to contradict it. Some ten years ago I was the only person who dared to disbelieve the dictum that former attacks predisposed to the disease; but I find now that the late Dr. Fagge, in his work on Medicine, takes the same view. Loss of health or debility in any form no doubt increases the liability to acute rheumatism. It also seems to be inherited, and in some persons there is such a strong tendency to the disorder that the slightest exposure to wet and cold, or to cold only, will bring on an attack, and occasionally no exposure at all can be traced. Other persons are much less liable to rheumatism, and only the most disastrous circumstances will produce the disorder. A large number of the community escape the disease altogether, no matter to what amount of wet and cold they may be exposed. "The most important exciting cause, perhaps the only one worth considering, is exposure to cold, and especially to cold and wet. Sleeping in a damp bed with insufficient clothing, remaining in wet clothes, sitting in a draught of cold air when heated—in fact, getting a 'chill' in any way, will often induce acute rheumatism in those that are disposed to it. Possibly it is the check thus given to the eliminating functions of the skin that determines an attack of the disease. It may be well to mention here that it is wet *and* cold that are so injurious; and if anyone find himself in a damp bed, he may minimise the mischief, perhaps save himself from any harm, by heaping on plenty of clothes, or by getting rid of the sheets and sleeping between the blankets only." In the same way, if we happen to get wet through from any cause, we should keep ourselves warm by sharp exercise until we can get a change of clothing, which ought to be effected at the earliest possible moment.

It is not often that we have the chance of making a post-mortem examination on a case of rheumatic fever during the height of the joint inflammation, but occasionaly a case proves fatal from cardiac complications or hyperpyrexia. We then find that the affected joints are more or less vascular, especially about the synovial fringes, and coated with a sticky, altered synovia. Sometimes there is effusion, but more commonly not, because

the joint mischief is apt rapidly to subside upon the occurrence of any fatal complications. It is said by Sir Alfred Garrod that no ulceration of the cartilages takes place in true articular rheumatism, even after repeated attacks of the disease; and very rarely, if ever, is pus found in the joints. When a case has proved fatal in consequence of cardiac disease, the post-mortem appearance will be in accordance with the mischief that has arisen during life. When death occurs in consequence of hyperpyrexia, we shall probably find evidence of pericarditis in about half the number of cases. Cardiac complication is not an essence of the high temperature, but only an occasional accompaniment. The post-mortem appearances in hyperpyrexia will generally include a vascular condition of the brain and meninges, a dark and congested state of the lungs; the liver and spleen are friable and easily broken down, and the kidneys usually congested. The blood is tarry and fluid, but the muscles are remarkable for their bright-red color. These changes, it will be noted, are simply the result of the high fever. The odour of such cases, even when recently examined, is most offensive.

The diagnosis of acute rheumatism is generally so simple and easy that I do not halt here to make any remarks on the subject. The prognosis is eminently favorable as far as the mere issue of the affection of the joints is concerned; but it must be guarded (1) in reference to possible cardiac mischief, and (2) the chance of hyperpyrexia, which latter, however, is but a remote contingency. Heart disease is more liable to occur in children; hyperpyrexia in adults. In the chronic forms of true articular rheumatism the prognosis is very favorable. I now come to the last and most important part of my subject—the treatment of rheumatic fever. A few years ago this was most unsatisfactory. I have seen alkalies, quinine, blistering, and other reputed remedies tried in a large number of cases, alone or in combination, but without being at all impressed by their value; and well might Sir William Jenner, when President of the Clinical Society, express the doubt and uncertainty with which he used to approach the treatment of articular rheumatism under the old *régime*. But some ten or twelve years ago a new and improved method of dealing with the disorder came into operation; and it is only due to Dr. Maclagan that he should have the credit of having been the first to use salicin as a remedy, which ultimately led to the introduction of salicylate of soda, one of its derivatives. I cannot say that I have had much success with salicin, though I have tried it in a number of cases, but he must be blind indeed who cannot perceive the great value of the soda salt. There may be some doubt as to whether its use shortens the duration of rheumatic fever, but beyond question it robs the disease of some of its most painful symptoms. In a few days, sometimes hours, the temperature is brought down, the inflammation and pain in the joints subside, and the patient is in most cases practically convalescent. It is not claimed for salicylate of soda that it will prevent the occurrence of heart complications, or even hyperpyrexia, but it lessens the chance of either mischief by rapidly reducing the fever. It must also be borne in mind that the drug is not an absolute specific. Where shall we find one? It fails to relieve or cannot be tolerated every now and then. But this is no more than what happens with quinine in ague, or iodide of potassium in syphilis Salicylate of soda sometimes produces sickness, deafness, tinnitus aurium, and a peculiar kind of cerebral disturbance; but these disagreeable effects quickly disappear on a discontinuance of the drug, and seldom return upon its resumption after a short interval. The salicylate has been charged with producing serious cardiac depression, and even causing sudden death; but the evidence on these points is not very clear, and personally I have never witnessed any such effects. In treating a case of articular rheumatism, the salicylate of soda may be given in doses of ten, twenty, or even thirty grains every two, three, or four hours, according to the severity of the symptoms and the effect produced. Where there is evidence of great acidity, some alkali (five to fifteen grains of the bicarbonate of potash) may be usefully combined with each dose of the salicylate, which is best given in some aromatic water to conceal its somewhat acrid taste. It is important to keep up the action of the drug for some days after the disappearance of the fever, as the premature disuse of it is apt to lead to a return of all the symptoms—a so-called relapse. Towards the close of a case of rheumatic fever, the joints are not unfrequently left rather swollen and painful; it is then that iodide of potassium (internally), and iodine paint (externally) are so useful. When quite convalescent, the patient should have tonics, and especially steel and quinine; and if rheumatic pains linger, the salicylate of quinine, in five-grain doses, three times a day, is often of much service. Other salts of salicylic acid will probably be found useful in the treatment of rheumatism; and lately a new preparation, "salol," has been introduced. It is a salicylate of phenol and has been used a good deal in America, with, I believe, satisfactory results. But it may be asked, What is to be done in those cases of articular rheumatism in which the salicylates are not successful? Well, it is unfortunate when this happens, but we may fall back upon large doses of salicin, upon alkalies, or upon the excellent alkaline quinine prescription of Sir Alfred Garrod. Quinine and bicarbonate of potash are rubbed up together with a little mucilage and some aromatic tincture, in such proportions that each ounce and a half of the mixture contains

five grains of quinine (in the form of carbonate) and thirty grains of potash. This dose may be given every four hours for as long as may seem desirable.

Of course, all cases of rheumatic fever must be kept in bed, and properly dieted. The most suitable nourishment in the earlier stages is the usual beef-tea and milk "fever" diet, but to this may soon be added some farinaceous food, eggs, and afterwards fish. Rheumatic fever is a disease of debility, and it is very desirable to keep up the strength of the patient; but in some cases the too early resumption of meat has seemed to be followed by a return of the rheumatism. Further information on this point would be of value Stimulants are not absolutely necessary, nor often needed, in cases of articular rheumatism; but they may be required at times, and should be administered in accordance with the condition of the patient. The bowels should receive attention, but no active purging is required, especially as the movements necessitated by any action of the bowels are attended with considerable pain in severe cases. On the other hand, opium or morphia, which may well he used hypodermically, is often of great service, alleviating the pain in the joints and allowing the patient to get some sleep. When cardiac mischief arises in a case of acute rheumatism, it should be treated in accordance with the plan adopted in such cases, the consideration of which is outside my subject. I must, however, say something about the treatment of hyperpyrexia, a matter of much interest and importance. It is unfortunate that in this severe condition, where most we want its aid, the salicylate of soda, though it was originally introduced as an antipyretic, should entirely fail. Nor can I say much that is favorable of any other of the reputed febrifuges, such as quinine, antipyrin, etc. In truth, we are driven, in the treatment of hyperpyrexia, to the application of external cold, and although some years ago I expressed a very doubtful opinion as to the efficacy of this method, a further knowledge of the subject has led to a considerable modification of my original views. There is now, I think, no question that the careful and judicious use of the cold bath or cold pack holds out the best chance of saving life in these truly formidable cases. The most important precaution would seem to be that the application of cold should be gradually and cautiously applied so as to avoid shock. This may be accomplished by placing the patient at first in a bath the temperature of which is not much below 80°F., and gradually reducing the temperature until the desired effect is produced. This bath may have to be repeated more than once perhaps, and the use at the same time of injections of ice-cold water into the rectum may be of service. Where a bath is not available, or thought to be undesirable for any reason, the cold pack may be tried. In cases where ice is not used, the patient's body and limbs are wrapped closely in a single sheet, which has been previously wrung out of cold water (temperature 50° to 60°). A blanket is then thrown loosely round him, and he is allowed to remain undisturbed for about half an hour, when the same process is gone through again, and repeated until the temperature is sufficiently reduced. When the ice pack is employed, a hip bath, or other suitable receptacle, containing a few gallons of water, in which some large pieces of ice are floating, is kept by the patient's bedside, and his body and each limb are separately wrapped in pieces of old sheeting which have been wrung out of the iced water, each piece being renewed as often as it begins to feel warm to the hand. No other covering of any kind is put over the patient. In this way the temperature may be very rapidly reduced, and it is necessary to be careful that it is not brought too low. It should not be allowed to fall below 99°F. Amongst many others, two cases have recently been reported, which tend strongly to show the value of external cold in the treatment of hyperpyrexia. One is by the late Dr. Carrington, at a meeting of the Clinical Society on February 25th last, and the other by Dr. Frederick Taylor, in the *Lancet* of March 12th, 1887.—*Lancet.*

THE DOCTOR'S WIFE.

"It is useless," says the Boston *Medical and Surgical Journal*, "to suppose for an instant that any description of the doctor's wife can do justice to her, for doctors' wives differ as stars from each other in magnitude, or, a comparison more to the point, quite as widely as their husbands. It is even doubtful if a composite photograph could so blend their many virtues and individualities as to produce a face in which each community could find their own doctor's wife. But yet, as a class, the wives of physicians possess certain common traits, as well as common graces, which are known and appreciated not only by their husbands, but by all those who possess an extended acquaintance with doctors and other families, though these characteristics are modified by the peculiarities of the woman, and the character of the practice to which she is wedded. The wife of a doctor in general practice differs very decidedly from the wife of a specialist. The business of the latter is commonly confined to certain hours; his office-door is tended by a trained servant, who does not need appeal to the wife for information as to the doctor's whereabout; but, in general practice, when the domestic answers the bell, and holds a parley with the anxious individual who wishes to find the doctor, the doctor's wife is very apt to be somewhere within hearing, at the head

of the stairs, or behind the office-door, and is very likely to take the conversation into her own hands. She, perhaps, knows the caller, and is able to dispose of him according to his merits. If it is near the time of the doctor's return, she may exercise various transparent devices for keeping him, allowing him, if he is garrulous, to tell her what has driven him to consult the doctor.

"In the early days of her married life she may have gone forth herself to pursure her husband in his route through the village, to hasten his footsteps in some new direction; but it would take something very unusual to start her off in a chase after the doctor in her maturer years. It seems to be a superstition among the more helpless class of patients that the doctor's wife must have some share of the wisdom which they attribute to her husband, and it is by no means rare for her advice to be asked as to the course to be followed when the doctor himself is not available, and she learns, in the course of years, a series of stock recommendations—that a baby in a fit may be safely put into hot water, that a broken leg can be left an hour or two until the doctor comes.

"But there are patients who resent her interference and disregard her suggestions. They will neither tell their errand nor promise to call again. They arouse, sometimes, her pity, sometimes her curiosity, a quality of which the model doctor's wife should possess but a minimum. She finds it difficult, sometimes, to manifest a proper interest in her husband's business without appearing too curious. She is seldom a gossip, or, if she is a little talkative with her neighbors, one of the staple topics of conversation will be the dreadful uncommunicativeness of her husband, whom, under such circumstances, she will possibly characterize as 'close-mouthed.'

"The doctor's wife is almost sure to hold strong opinions on hygienic subjects, and she talks with an air of learning about sewers, traps and ventilation.

"If she is the wife of a doctor who practices in the city, she holds strong ideas about medical charities Perhaps she appreciates too highly the doctor's unpaid efforts She has been known to express very radical ideas about hospitals, and night-calls she abominates. She does not like the doctor to imperil his life by attendance on diphtheria. In fact, her constant tendency is to overvalue his services. She feels that he does not receive all he ought for the exhausting labor he performs. And yet, with the sweet inconsistency which belongs to the sex, she hurries the good man off on certain occasions. She has been known to drop to sleep after the night-bell had summoned him, and, awakened again by the noise he makes on his return, oblivious of the time that has passed, to chide him that he has not yet started

"She takes it to heart when the doctor is discharged from a case and a rival practitioner installed over it, and if the family who have thought it for their interest to make the change are numbered among her friends, a little coolness is an almost inevitable result. Her lifelong friends do not always fully appreciate her husband's peculiar virtues, and it is a constant surprise to her that any of them should continue to employ their old practitioner.

"The doctor's wife is usually emphatically the domestic manager. The domestic machinery is of necessity left to her control, for the irregular and absorbing nature of the doctor's vocation renders him somewhat unreliable as a purveyor. He is occasionally absent-minded, even when present in the body. If he undertakes to do the marketing, he will forget to order the dinner. On the other hand, the care of the children is apt to pass into the doctor's hands rather more than in other families. He gets up at night to see why John coughs, and what it is that makes Benjamin so restless.

"There is one fond delusion which the doctor's wife hides in her own breast, and never reveals, except to her mother, her sisters, and her few intimate friends, and occasionally to her husband, when he is particularly exasperating: she is sure that her husband's success in his profession is, in reality, due to her. His professional attainments are all very well, but, without her directing hand, who can tell where his lack of worldly wisdom would have led him?"

Whereupon an unfortunate, who signs himself "Cœlebs, M.D.," writes to our contemporary as follows: "Your remarks in the last issue of your valuable journal upon the Doctor's Wife call forth from my heart certain personal reminiscences not unmixed with pain. 'Pins,' says the infant prodigy, 'save a great many people's lives because they don't swallow them' So doctors' wives ruin the prospects of hundreds of us young fellows because we don't have them. Shall I tell you my sad fate? Two years ago, on the death of old Dr. Gamboge, two of us, as is the custom, moved into town to take his place. My friend and classmate, Dr. Benedick (alas, no longer my friend!) and I each arrived on the ground about half an hour after the old doctor had breathed his last. We were pretty well matched in what is popularly but erroneously supposed to be the preparation for practice, and we entered the race neck and neck. We were, as Virgil says, or might have said, *Et secare pares, et exercere parati.* Well, we took lodgings on opposite sides of the main street, and the fight began. As fast as I scored a point Benedick scored another, and somehow his points always seemed to count for a little more than mine. I went to the brick church, which was larger, and he went to the wooden meeting-house, which had the most old families. My chimney blew down and I got it in for a five liner in the local paper, but the next week one corner of his house took fire

and he got it in for ten lines. I put on my door an old-fashioned knocker and he put in an electric bell. The country people knew all about knockers, but the electric bell was something they couldn't quite grasp (figuratively I mean; they grasped it often enough literally). Finally I fell into the common pit, and bought a horse long before I needed it or could afford it. The first time I passed Benedick on the street he smiled in an unpleasant way and said: 'Oho, I've got on to a racket worth two of that,' and the next thing I knew he was married. His wife distanced my horse in no time. She went to the sewing-circle and every good patient he ever had was brought into the conversation in some way. Even if he was only called into a house to see the cook, the women all learned that he had been there, though they didn't know (for 'I mustn't talk about my husband's affairs') who the patient was. Then, when the wedding-calls were returned, into every house went some mysterious hint, not too definite, of Benedick's wonderful success. Were there children in the family, 'The doctor is so fond of children, and they all take to him so quickly!' Had any of the household met with an accident, 'The doctor is very fond of surgery.' Were any little dresses in making, 'My husband is such a good baby-doctor. Whatever should I do if it weren't for him!' She always found out who the family physician was, and this information, of course, was the first and most important step toward ousting him. If a new-comer moved into town, the grocer and butcher were hardly more prompt in leaving their cards at the back door than Madam in presenting *her* business-card at the front door. If little Susy Simmons swallowed a pin, and the horrified mother was running amuck for the nearest doctor she could find, she was beguiled in by Mrs. Benedick to wait for her doctor, whom she 'expected in every minute.' No emergency cases ever would wait for me to come home, and whenever a patient eager for immediate healing turned away from my door, he was invariably gathered in by the siren across the way, who either entertained him till her partner's return, or else got his name booked for a visit. They were two, or more than two, to my one. It takes two men to run the Punch and Judy show—one to work the figures, the other to do the talking, get in the crowd, and take up the collection. I had to run my show alone, and didn't take up much money. I wonder if King Lemuel's mother did not have such a doctor's wife in mind when she told him the memorable story of the virtuous woman. There are certain internal evidences that she did. 'She perceiveth that her merchandise is good. *Her candle goeth not out by night.* . . . Her husband is known in the gates, where he sitteth among the elders of the land.' By the way, Mrs. Benedick has already got her husband on to the School Committee, and, I hear, is thinking of sending him to the Legislature next year. There is nothing left for me but to move on and try it somewhere else. *Væ victis.* I fondly thought when I spent my money for a horse and carriage that I held the 'right bower'; but I have found that Benedick has the 'joker.' And now, before trying my fortune in a new field, I must have, cost what it may, a wife. Bitter experience, as well as the tenor of your editoral, convince me of it."—*N. Y. Med. Jour.*

A SURGEON'S LIFE.*

I have always held that it is impossible for any man to be a great surgeon if he is destitute, even in an inconsiderable degree, of the finer feelings of our nature. I have often lain awake for hours the night before an important operation, and suffered great mental distress for days after it was over, until I was certain that my patient was out of danger. I do not think it is possible for a criminal to feel much worse the night before his execution than a surgeon when he knows that upon his skill and attention must depend the fate of a valuable citizen, husband, father, mother or child. Surgery under such circumstances is a terrible taskmaster, feeding like a vulture upon a man's vitals. It is surprising that any surgeon in large practice should ever attain to a respectable old age, so great are the wear and tear of mind and body.

The world has seen many a sad picture. I will draw one of the surgeon. It is mid-day; the sun is bright and beautiful; all nature is redolent of joy; men and women crowd the street, arrayed in their best, and all, apparently, in peace and happiness within and without. In a large house, almost overhanging this street so full of life and gayety, lies upon a couch an emaciated figure, once one of the sweetest and loveliest of her sex, a confiding and affectionate wife and the adored mother of numerous children, the subject of a frightful disease of one of her limbs, or it may be of her jaw, if not of a still more important part of her body. In an adjoining room is the surgeon, with his assistants, spreading out his instruments and getting things in readiness for the impending operation. He assigns to each his appropriate place. One administers chloroform; another takes charge of the limb; one screws down the tourniquet upon the principal artery, and another holds himself in readiness to follow the knife with his sponge. The flaps are soon formed, the bone severed, the vessels tied, and the huge wound approximated. The woman is pale and ghastly, the pulse hardly perceptible, the skin wet with clammy perspiration, the voice husky, the sight indistinct.

*From the Autobiography of the late Dr. Gross.

Some one whispers into the ear of the busy surgeon: "The patient, I fear, is dying." Restoratives are administered, the pulse gradually rises, and after a few hours of hard work and terrible anxiety reaction occurs. The woman was only faint from the joint influence of the anæsthetic, shock, and loss of blood. An assistant, a kind of sentinel, is placed as a guard over her, with instructions to watch her with the closest care, and to send word the moment the slightest change for the worse is seen.

The surgeon goes about his business, visits other patients on the way, and at length, long after the usual hour, he sits down, worried and exhausted, to his cold and comfortless meal, with a mouth almost as dry and a voice as husky as his patient's. He eats mechanically, exchanges hardly a word with any member of his family, and sullenly retires to his study to prescribe for his patients—never forgetting all this time the poor mutilated object he left a few hours ago. He is about to lie down to get a moment's repose after the severe toil of the day, when suddenly he hears a loud ring of the bell, and a servant, breathless with excitement, begs his immediate presence at the sick chamber, with the exclammation, "They think Mrs.—— is dying." He hurries to the scene with rapid pace and anxious feeling. The stump is of a crimson color and the patient lies in a profound swoon. An artery has suddenly given away, the exhaustion is extreme, cordials and stimulants are at once brought into requisition, the dressings are removed and the recusant vessel is secured.

The vital current ebbs and flows, reaction is still more tardy than before, and it is not until a late hour of the night that the surgeon, literally worn out in mind and body, retires to his home in search of repose. Does he sleep? He tries, but he cannot close his eyes. His mind is with the patient; he hears every footstep upon the pavement under his window, and is in momentary expectation of the ringing of the night-bell. He is disturbed by the wildest fancies, he sees the most terrific objects, and, as he rises early in the morning to hasten to his patient's chamber, he feels that he has been cheated of the rest of which he stood so much in need. Is this picture overdrawn? I have sat for it a thousand times, and there is not an educated, conscientious surgeon that will not certify to its accuracy.—*Med. Age.*

MEDICAL NOTES.

It is asserted that four drops of oil of sassafras added to an ounce of *iodoform* completely destroys the disagreeable odor.

Turpentine, in doses of 20 or 30 minims, is said, by a recent writer, to remove some forms of *headache* and produce a wonderfully soothing effect upon the patient.

Salol is recommended for *menorrhagia*, in the *Rév. de Thérap.*, in the following formula:—

℞.—Salol, ... 10 parts.
Acaciæ, ... 5 "
Aquæ destillat, ... 200 " M.
Fiat emulsio.

In *nervous headache* the following will often be found an efficacious and prompt combination:—

℞.—Acid. hydrobromic. dilut.,
Extract guaranæ, fluid., . āā f℥ss. M.
SIG.—Dose, a teaspoonful in half a tumbler of water, repeated *pro re natâ.*

In *insomnia*, Dr. J. W. Brayton (*Med. Rec.*) commends the use of antipyrine. He states that it is of particular value in the neuralgias and spasmodic affections occurring in those persons who cannot take opium or any of its alkalies in any food, but especially beneficial in insomnia, giving refreshing sleep after failure with the usual remedies.

For hypodermic use in *neuralgia*, Dr. East, of Mayo (*Phila. Polyclinic*), recommends the following:—

℞.—Thein.,
Sodii benzoat., ... āā ℥j.
Sodii chlorid., ... gr. viij.
Aquæ destillat, ... f℥j. M.
Six minims equals half a grain of theine.

Dr. Fordyce Barker, in the *American Journal of Obstetrics*, says the most valuable remedy for *hemorrhages* occurring at or near the climacteric, is a combination of equal parts of fluid extract of hamamelis and fluid extract of hydrastis.

In regard to the use of *iodoform* as an aseptic and antiseptic, Dr. John Wyeth, of New York, says, in the *N. Y. Medical Record*:—For two years past I have abandoned it in dressings, and have never had better results. I am forced to conclude that it is an unnecessary complication to the aseptic dressings, to say nothing of its persistent and offensive odor. The employment of the weaker sublimate solutions for irrigation, 1 to 3,000 and 1 to 5,000, the sublimate gauze dressings applied moist and kept so by protectives, will secure in my opinion, as perfect asepsis as is possible.—*Coll. and Clin. Rec.*

THE LATE PROF. BALFOUR STEWART.—We regret to announce the death of Professor Balfour Stewart, M.A., LL.D., F.R.S. Mr. Balford Stewart, who had just only completed his 59th year, was educated at the Universities of St. Andrews and Edinburgh. In 1859 he was appointed to the directorship of the Kew Observatory, and in 1867 to the secretaryship of the Meteorological Committee, which last appointment he resigned on his promotion to the professor's chair of Natural Philo-

sophy in Owen's College, Manchester, in the year 1870, a post which he held until his death. Two years before this distinction was conferred upon him he had been awarded the Rumford medal by the Royal Society for his discovery of the law of equality between the absorptive and radiative powers of bodies. Together with Messrs. De la Rue and Loewy, he wrote "Researches on Solar Physics," and he and Professor Tait published their researches on "Heating produced by Rotation in Vacuo." Besides these he wrote a number of treatises especially on the subjects of meteorology and magnetism. The article in the "Encyclopædia Britannica" on "Terrestrial Magnetism" is from Professor Balfour Stewart's pen. Among the many works of which he was sole or joint author may be mentioned the "Elementary Treatise on Heat," "Lessons in Elementary Physics (1871), "Physics" (1872), "The Conservation of Energy" (1874), and Practical Physics" (1885). Most of these are text books on the subjects of which they treat. He and Professor Tait also produced the "Unseen Universe," a work of which twelve editions have been published. At the time of his death he was President of the Physical Society of London, and was a member of the committee appointed to advise the Government on solar physics. Professor Balfour Stewart died on Monday at Ballymagarvey, Balrath, in the County of Meath.—*London Times.*

Diphtheritic Paralysis of the Pneumo-gastric.—Suss (*Rev. Mens. des Mal. de l' Enf.*,) draws the following conclusions:

1. In the course of diphtheritic paralysis functional troubles are often observed in the sphere of the pneumo-gastric nerve. 2. The effect of these troubles is seen with reference to the heart's action in slowness, quickly followed by acceleration and smallness of the pulse. Precordial pain and violent pain in the heart itself are usually associated with these conditions. 3. With reference to the respiratory passages, the symptoms are dyspnea and sometimes great irregularity in inspiration and expiration. Less frequently patients suffer from Cheyne-Stokes respiration. 4. With respect to the digestive passages, there are very violent gastro-intestinal pains, and almost always vomiting of food or mucus. 5. Should all these symptoms be associated the disease would usually run a rapid and fatal course, probably within twenty-four hours. 6. If the pulmonary— and, still more, if the cardiac—symptoms are isolated, we may look for a cure in some cases, though it is not possible to say with what frequency. 7. All of the accidents occur most frequently in the progress of a paralysis of the velum of the palate. The presence of this condition should compel a physician to give a very guarded prognosis. 8. The only treatment which has been of any benefit for this diseased condition is electricity, which may be applied over the cardiac region or over the posterior region of the chest. 9. It is absolutely certain that the heart-clots found, *post mortem*, in the cases which have been studied by the author as the basis of this paper, have no bearing in explaining the phenomena which have been referred to. 10. The bulbar lesions which have been found in the course of these investigations could account for the pulmonary and cardiac disturbances only in isolated cases, and could give no information as to their curability. 11. Changes in the terminal branches of the pneumo-gastric—that is, in the fibres of the pulmonary, cardiac, and abdominal plexuses—can alone explain the peculiar phenomena which were observed in the study of the author's case. The complete explanation must come from histological investigation, which will be supplementary to the author's clinical studies.—*Archives of Pediatrics.*

Hypodermic Injections of Carbolic Acid in Cases of Rheumatism.—According to the Vienna correspondent of the *British Medical Journal*, Oct. 8th, 1887, Professor Benedict has been using with extraordinary success hypodermic injections of a two per cent. solution of carbolic acid in the treatment of rheumatoid affections. He asserts that in even a few moments after the injection into the part the joint will be freely movable and free from pain, as though narcotized, and in recent cases joints in which there was great tenderness on pressure and distinct swelling of the bones, would be apparently free from disease a few days after the injections; not only would the pain disappear in the joints in whose neighborhood the injections had been practised, but would be markedly lessened in distant joints. Prof. Benedict believes that the carbolic acid has not only a local influence, but a general effect in causing the elimination of the rheumatic poison. He has especially obtained good results by the simultaneous use of salicylic and carbolic acids, when the salicylate of sodium is administered by the mouth in small doses, and one to three subcutaneous injections of carbolic acid being given in twenty-four hours, the course of the affection was very much accelerated and no bad consequences were observed, especially if the treatment was carried out from the very beginning of the disease. Extraordinarily good results were obtained by the method in cases of inflammation of the sheaths of tendons, especially after injury. A few injections sufficed to cut short the morbid process, and no local pain or muscular atrophy, etc., was observed, provided the disease was treated in the above mentioned way from the very outset. —*Ther. Gazette.*

Pott's Fracture.—In a paper on this subject Mr. Robert Jones states that, since the original description given by Pott, a hundred years ago, no

great advance has been made either in the anatomy or treatment of the fracture associated with his name. The clinical signs of this lesion are, briefly, a depression over the side of injury, eversion of the foot, a prominent inner malleolus, and a swelling round the ankle-joint. The fracture takes place usually about two inches above the malleolus, the deltoid ligament being often ruptured, and the astragalus separated from the tibia. Dislocation of the foot outward, it is held, is not an essential and absolutely diagnostic symptom, as a slight outward displacement may occur on separation of the tibia from the fibula, without fracture of this latter bone, and outward displacement of the astragalus. Reference is made to two cases in which the fibula was certainly intact, although there was marked simulation of Pott's fracture. The precise spot of fracture, which varies in different cases to the extent of three or four inches, is often obscured by rigidity, due to swelling. The patient, guided by pain, is often able to place his finger on the exact point. On pressure upon the upper third of the fibula the patient is generally able to refer pain to the seat of fracture As a rule, the surgeon can only guess at the direction of the fracture. Prominence of the inner malleolus, though always present, is not essentially diagnostic. It occurs in certain fractures of the lower end of the tibia, and in sprains of the ankle where laceration of the deltoid ligament has taken place, a tense swelling is often found sufficiently deceptive to lead to a possible error in diagnosis. It is very often difficult to make out crepitus in cases of this fracture. Eversion of the foot usually fails to cause this symptom. It is more likely to be produced by inversion, but the movement best calculated to elicit it consists in combined flexion and inversion. In twenty-nine out of seventy cases the lesion was complicated by fracture of the inner malleolus. The deformity in cases of Pott's fracture occurs and is intensified, Mr. Jones holds, through the continuation of the force which was employed upon the fracture. .. foot is fractured by inversion, and then the deformity is generally inversion. Patients do not usually realize the extent of the injury, and continue to walk until a trivial becomes a marked deformity. Fracture due to direct force is less prone to luxation. In the treatment of Pott's fracture the reduction of deformity is accomplished the more readily in proportion to the absence of delay. The earliest chance should be seized of replacing the astragaloid luxation, The attempt at reduction should be long continued. If the reduction be completely effected there is no subsequent tendency to recurrence of the deformity, and, therefore, no necessity to employ splints devised to counteract special displacement. Lest, however, a little deformity remain, it is well to apply a couple of side-splints and a posterior splint, the side-splints being furnished with pads suitably arranged to minimize deformity. When the splints (which in Mr. Jones' practice are made of malleable sheet-iron) have been adjusted, the knee should be flexed and the leg be made to rest on its outer surface; the foot be maintained at a right angle to the leg. The injured limb should be kept in splints for fully five weeks. In conclusion, Mr. Jones offers a few suggestions regarding the treatment of cases in which, long after active treatment of Pott's fracture, the patients complain of pain, deformity, or inability to walk—*The London Medical Record.*

Antiseptic Rules for Monthly Nurses.—In a paper introducing a discussion on the prevention of puerperal fever, at the Section in Obsteric Medicine of the British Medical Association (*Brit. Med. Jour.*), Dr. W. S. Playfair laid down the following "antiseptic rules for monthly nurses": 1. Two bottles are supplied to each patient; one contains a solution of chloride of mercury, of the strength of one part to one thousand of water, tinted with litmus (called the 1-in-1,000 solution), the other carbolized oil (1 in 8). 2. A small basin containing the 1-in-1,000 solution must always stand by the bedside of the patient, and the nurse must thoroughly rinse her hands in it every time she touches the patient in the neighborhood of the genital organs. for washing or any other purpose whatsoever, before or during labor, or for a week after delivery. 3. All sponges, vaginal and rectal pipes, catheters, etc., must be dipped in the 1-in-1,000 solution before being used. The surfaces of slippers, bed-pans, etc., should also be sponged with it. 4. Vaginal pipes, enema tubes, catheters, etc., should be smeared with the carbolized oil before use. 5. Unless express directions are given to the contrary, the vagina should be syringed twice daily after delivery with warm water, with a sufficient quantity of Condy's fluid dropped into it to give it a pale pink color. 6. All soiled linen, diapers, etc., should be immediately removed from the bedroom.

Ninety Tape-worms and One Girl.—In the *Correspondenzblatt fur Schweizer Aerzte*, Dr. Roux, Surgeon of the Cantonal Hospital in Lausanne, describes a singular case in which the patient, a girl aged twenty-one and a half, discharged (after two six-gramme doses of extract of male fern) at least ninety bothriocephali lati. The worms passed out in a bundle, the patient assisting the delivery by tearing the package with both her hands, and at the same time uttering shrieks like a woman in labor. The agonizing delivery lasted ten minutes. The mass of parasites filled up half of a chamber utensil. The disentangling and counting took exactly four hours and a half of the author's time. As an individual only such a worm was considered which had a head, and at its other end measured not less than 3 or 4 millimetres in breadth, or

which had an absolutely thread-like (though headless) anterior end, and measured not less than one metre in length. Numerous very long ribbons, which did not answer those conditions, were left out of the reckoning; neither were any of the ribbons which had been discharged several times by the girl for a couple of weeks, previously taken into account. There could be no doubt, therefore, that the number of worms, given as ninety, in reality far surpassed that figure. The length of individual bothriocephali varied between 250 and 60 centimetres, a large number measuring only between 100 and 60. Except some slight nervous phenomena (such as occasional headaches, vivid dreams, *semi-somnambulism*), the patient did not present any morbid symptoms. She was a robust, and ruddy, and even cheerful and active, country girl, with excellent appetite and digestion, and with ninety-five or ninety-seven per cent. of hemoglobin in her blood (as Gowers-Sahli's hemoglobinometer showed). The case seems to give a support to Dr. Zschokke's theory, according to which the prevalence of bothriocephalus latus among the population residing around Lake Leman should be attributed to the eating of infected fish, mainly that of perch (*perchette*) At least the girl, who had come to the locality from Argovia about the Easter of 1884, during a period of several months' duration, in 1886, was dining on perch (and bothriocephali) once a week, or even still more often, the patient residing at the time at Bonvard, near the lake mentioned.—*Br. Med. Jour.*

The time for the Administration of Acids Alkalies, etc.—A correspondent of the *Brit. Med. Jour.* says: "My teacher, Sir Robert Christison, as far as I can remember, taught us the following rules: Alkalies should be given before food. Iodine and the iodides should be given on an empty stomach, when they rapidly diffuse into the blood. If given during digestion, the acids and starch alter and weaken their action. Acids, as a rule, should be given between the digestive acts, because the mucous membrance of the stomach is in a favorable condition for the diffusion of the acid into the blood. Acids may be given before food when prescribed to check the excesssve formation of the acids of the gastric juice. By giving it before meals you check the osmosis stomach-ward of the acid-forming materials. Irritating and dangerous drugs should be given directly after food, such as the salts of arsenic, copper, zinc, and iron, except where local conditions require their administration in small doses before food. Oxide and nitrate of silver should be given after the process of digestion has ended; if given during food, chemical reactions destroy or impair their special attributes, and defeat the object for which they were prescribed. Metallic salts, especially corrosive sublimate, also tannin and pure alcohol, impair the digestive power of the active principle of the gastric juice, so should appear in the stomach during its period of inactivity. Malt extracts, cod-liver oil, phosphates, etc., should be given with or directly after food, so that they enter the blood with the products of digestion."—*N. Y. Med. Jour.*

Fecal Anemia.—Sir Andrew Clark did good service recently in calling attention to the importance of constipation as a factor in the production of anemia or chlorosis in young women. Whether or not this theory of the mechanism of their causation by the absorption of the products of the decomposition of retained feces be correct, clinical experience indicates plainly enough that a very close relationship exists between the two. Not only with regard to fecal accumulations, but in respect to retained excretions anywhere, the same observation holds good. This fact accounts for the good effects which attends purgation in so many disordered conditions more or less dependent on the non-elimination of the excrementitious products. When the effect of decomposition compounds are superadded to those of non-elimination, it is not surprising if a morbid condition of things be engendered. It was incidentally remarked that fecal accumulation may take place without constipation. In other words, there may be daily but imperfect action of the bowels. Although this is a trite observation, it is but too frequently lost sight of in the treatment of these conditions. The role of ferrugineous preparations, in restoring the blood to its normal condition is an important one, but it is quite subsidary to the necessity for effecting a thorough clearance of the overloaded colon. For this purpose our forefathers resorted to a combination of iron and aloes, which fulfils every indication and has the merit of being less nauseous to take, if given in the form of pills, than the horrible blend of Epsom salts and perchloride of iron which figures in every hospital pharmacoopeia. —*Med Press and Cir.*

Contempt of Court.—Of all the curious reading that we have enjoyed in some time, we think that offered by a communication from Dr. F. E. Stewart to the current number of the *Druggists' Circular*, certainly caps the climax. It affords a splendid illustration of the wisdom of the adage which advises the shoemaker to stick to his last. Wherever a physican strays from his own profession into the intricacies of the law, and especially of the patent laws of this country, his feet are in dangerous and slippery ground, no matter where his head or heart may be. In the present paper, Dr. Stewart attacks the recent decision of the United States District Court in the matter of the suit of Battle & Co., against the Grosses (Daniel W. and Edward Z.) for infringement of their

copyright of Bromidia He declares that the decision is not final or binding, and advises the Grosses and druggists generally not to pay any attention to it. Dr. Stewart thus puts himself in contempt of the United States Courts and advises others to place themselves in the same foolish and dangerous predicament. The queer part of the matter, however, is, that every reason which he advances against the validity and justice of the decision is the strongest possible argument in its favor, and the reader must be obtuse indeed not to see that it is so. This view of it was evidently taken by the editor of the *Circular*, who says:—"While giving Dr. Stewart's argument publicity on account of its novelty, we think it proper to remind pharmacists that they are bound by the decision so long as it is allowed to stand"—which advice is good, sound sense, like pretty much everything that emanates from the editor of the journal quoted. —*St. Louis Med. and Surg. Jour.*

The Treatment of Psoriasis.—Besneir uses

R.—Naphthol (*b*). . . 1 part.
Adipis, ... 9 parts.

The affected part is to be well rubbed with this salve before retiring, and flannel worn during the night; in the morning a bath of hot soapsuds should be taken.

If no improvement follows after five days of this treatment, pyrogallic acid is used, 5 or 10 to 100. To avoid irritation, friction is employed on small surfaces only, and these surfaces are changed every four days.

For extensive surfaces, Besnier employs a dressing of—

R.—Acid. pyrogallic.
Acid. salicylic, . . . āā gr. 90.
Ether and alcohol, q. s. to liquefy.
Add collodion flex., . ℥ 20.

Rev. Gén. de Clin. et de Thérap. — Med. News.

Antisepsis of the Bladder and Urethra.—At a recent meeting of the French Academy of Medicine, Lavaux read an account of his method of treatment of the bladder and urethra, with the following conclusions: Continued lavage of the anterior portion of the urethra and intravesical injections without a sound, are the most simple and harmless method of genito-urinary antisepsis, which can be employed in all diseases of the urethra. The use of antiseptics and hot injections by this method greatly lessens the danger of accidents in rapid dilatation of the urethra. Rapid dilatation, for simple strictures, is greatly to be preferred, with these precautions, to slow dilatation. Intravesical injections, made without the use of a sound, are quite sufficient to maintain the calibre of the dilated urethra. By these methods the indications for urethrotomy are much less frequent. Divulsion of obstinate strictures is rendered much less dangerous by the method.—*L'Union Médicale. Med. News.*

NEW VAGINAL SPECULUM.

The accompanying illustrations represent a speculum designed by Mr. Butler-Smythe, and made by Messrs. Maw, Son & Thompson, of London. The speculum consists of two slight concave blades of unequal size, hinged together. Fig. 1 shows the instrument open and ready for use; Fig. 2 the same closed. It may be used with the

Fig. 1.

patient lying either on her side or back, and, when introduced, one blade acts as a retractor, whilst the other forms the handle. The instrument has been used for some time in hospital and general

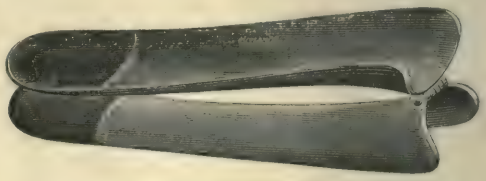

Fig. 2.

practice, and has been found convenient for diagnosis, and useful in cases where the vagina has had to be tampooned or plugged in cases of hemorrhage. Not the least point in its favor is its portability, an important consideration in practice. The blades fold back on each other, and thus enable it to slip into the pocket, where it takes up but little room.—*Brit. Med. Jour.*

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The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE BACILLUS OF CANCER.

Since the great majority of contagious and infectious diseases have been shown to be due to the presence in the tissues of a micro-organism, the medical world has been expecting some explanation as to the cause of malignant growths, and especially of cancer. The question of the contagiousness of cancer, antedates the discovery of disease germs, numerous writers having remarked on cases which came under their notice, where there was apparently a fair probability that the virus of cancer had been introduced into the tissues of healthy persons, and had produced its specific results. Some recent writers laugh at the idea of the possibility of such infection, notwithstanding numerous cases which have recently been published, apparently not so much with the idea of supporting the theory of contagiousness, as of placing before the profession facts which, other things being equal, would cause careful men to pause before delivering snap judgments on matters, which from want of sufficient scientific training they are incapable of comprehending. Thus cases of cancer of the penis in men whose wives suffered from malignant disease of the womb; of cancer growing upon a limb opposite to one on which a malignant growth already existed; of a nurse acquiring cancer after having washed for a length of time the dressings of a cancerous os, and others too numerous to recite, seem to point in a direction opposite to that of mere accidental occurrence. Till within a very short period of time, all such cases were ruled out of court as infectious by scientists, because no specific organism had been found which would in any way account for such transmissions as we have referred to above. Because Koch was unable to discover a *bacillus* in cancerous growths, not a few were ready to declare that no such bacillus could exist. But he did not find the coccus of erysipelas, yet to-day no one doubts that Fehliesen did. The discovery of a cancer bacillus was left for Scheurlen, of Berlin, who in a late communication to the Verein für inner Medecin, gave the result of his investigations in this subject. He made experiments with about forty specimens of cancer of the breast; from every specimen he inoculated twenty culture tubes, thus giving in all 800 specimens. The tumors were washed in a sublimate solution, and the "cancer-juice" scraped from the freshly-cut surface by means of a sterilized knife. He used as cultivating media, serum from a case of pleurisy, gelatine, potato and agar-agar. The growth of organisms was rapid and luxuriant, forming colorless films upon the surface of the fluid, which films afterwards became brownish yellow. At first there were found only bacilli, but later, spores made their appearance. He found the same spores in the cancer-juice, but in smaller numbers than the bacillus, whilst in sections of the tumors no bacilli were found. He had no difficulty in staining the bacillus, but the spores did not respond so easily; no method having been found successful, except Erlich's process for staining the tubercle bacillus. The spores were found both within and without the cells. For nearly two months (since Oct. 1st) Scheurlen has been experimenting with the products of his cultures. He inoculated six bitches in one of the mammary glands, and found in two, which died swellings had formed at the seat of inoculation. The swellings were not conclusive as to the theory of transmission, though they point strongly in that direction; they consist of granulation cells, epithelioid cells, together with bacilli. Scheurlen does not doubt that the results obtained are due to chronic inflammation with cancerous degeneration. It may be mentioned that in medical circles in Berlin, no decided belief in the specificity of the bacillus discovered is held, though the communication and subsequent discussion has attracted a good deal of attention. Virchow and Von Bergman have ap-

parently thrown some cold water on the enthusiasts, and the profession generally are now looking to Koch. Fränkell, who is considered one of the first bacteriologists in Germany, objected to the methods of Scheurlen, saying that secondary infection might have occurred, and that it has frequently happened. He also pointed out that the quick growth of the bacillus, a few hours, does not correspond to the known slow growth of cancer, and that degenerate cells always form a favorable nidus for bacterial growth.

Dr. Schill, of Dresden, has been working on the same lines as Scheurlen for the past five years, and is said to have obtained results similar to his. The presentation of his view of the case will be full of interest to the medical world, but in the meantime the matter is *sub judice*, with perhaps a leaning to the supposition that a genuine cancer bacillus has been found. Dr. Bigelow, in the *Boston Medical and Surgical Journal*, says: "To those who know the ins and outs of professional feeling in Berlin, the fact that the discovery was made in Leyden's clinic and not elsewhere is not without significance." It would not be just to accuse such men as Virchow and Bergman of a jealous belittling of a new man, and their scant endorsement of his results are more probably due to a truly scientific spirit of conservatism.

SURGICAL TREATMENT OF TUBERCULAR PERITONITIS.

The views so long entertained by the profession regarding tuberculosis, have during the past year received a shock. The frequency of laparotomy, and the comparative impunity with which the abdominal viscera can be inspected and subjected to manipulation and surgical treatment, have ceased to surprise us. But that such an intractable constitutional malady as tubercular peritonitis can be remedied, by opening the abdomen, making local application, washing out, and even sponging the diseased parts, is at least remarkable. But this is not all. It is claimed that treating the abdominal disease in this manner, exerts a most favorable influence on the concomitant lung affection, if any be present. It is stated that Mr. Lawson Tait, the celebrated laparotomist of Birmingham, first performed the operation, and now claims a uniform success for it, *per se*, and a complete cure of the disease in 80 per cent. of all cases of turbercular peritonitis subjected by him to this method of treatment. But to Mr. Frederick Treves, is due the credit of first definitely proposing and successfully carying out the novel treatment for this disease. Already over one hundred cases are recorded with a mortality of less than twenty per cent., which is such a remarkable showing that we might find it difficult to believe, did not the statement come from very reliable sources. As a matter of fact, they are so well authenticated, that we are compelled to accept them, notwithstanding the violation of our preconceived opinions. Kussmaul, has lately read a report before a German Surgical Society, of thirty-six cases, of which but six died, and of the latter four died subsequently of general tuberculosis.

Some of the cases treated were first aspirated, with the view of relieving the pressure, but while this allayed the mechanical distress, it in no other way benefited the malady. It was only after the abdomen was opened and the cavity thoroughly cleaned by either pure or carbolised water, applied in large quantities, and the affected parts sometimes sponged, that the remedial results were clearly apparent. A drainage tube left in the wound is considered essential by most operators, although one at least has been successful without it. In one or more cases an injection of a solution of iodine was tried with complete success, after cleansing the abdominal cavity. The operators admit that sufficient experience has not yet accumulated to definitely establish the best method of cleansing the peritoneum, nor to clearly indicate the proper cases to select for operation. But with such alleged success, and the rapidity with which the operation is spreading among our most prominent surgeons, these desiderata will not be long delayed.

Why complete immunity from the re-accumulation of ascites obtains after the abdominal section and cleansing, does not yet appear to be thoroughly understood, especially as re-accumulation nearly always occurs after aspiration and tapping. The idea was suggested by one of the operators, that the very satisfactory results of laparotomy were produced by removing the toxic products resulting from the life of the bacilli in the tubercles, contained in the ascitic fluid, and preventing absorption and baneful effect on the system; but we would

naturally suppose that if the ascitic fluid were the only cause of the constitutional effects, tapping should answer a similar purpose. But experience so far has taught us that this method of surgical treatment has so far excelled any former method, that we are justified in adopting it in all suitable cases. And we can only express our regret that the seriousness of the operation will prevent its frequent adoption by the general practitioner, and deter the patient from submitting to so severe an ordeal.

The surgeon is thus encroaching, step by step, on what was formerly considered the exclusive domain of the physician. The brain is now largely submitted to surgical control. The liver and the kidneys are subject to direct investigation as well as most other abdominal organs, and now so medical a disease as tuberculosis is attacked, and in some degree subdued by this aggressive surgical knife. This may be, and probably is, a result of the natural law of the survival of the fittest, to which even great physicians must submit as well as all others; for by the universal operation of so important a law, not only science, but the world advances and is improved.

THE MICRO-ORGANISM OF VACCINIA.

Much interesting research has attended the investigation of the nature of vaccine virus. Not only have scientists given much thought to the subject, because of its scientific interest, but more utilitarian reasons have been added to spur investigators to the unravelling of the mystery which surrounds the subject. There has been (*Lancet*) a reward of £1000 offered since 1883 by the Grocer's Company of London, for the discovery of a "method by which the vaccine contagium may be cultivated apart from the animal body, in some medium or media not otherwise zymotic; the method to be such that the contagium may by means of it be multiplied to an indefinite extent in successive quantities, and that the product of any number of such generations shall (so far as can within the time be tested) prove itself of identical potency with standard vaccine lymph."

Among many papers on this subject, that of Dr. Neil Carmichael, read before the Philosophical Society of Glasgow, is of great interest and importance. He has found that micrococci, often in chains are always present in vaccine lymph, whether this be humanized, or from the calf; and that no other organisms are present. He concludes that these organisms are the active principle of virus, giving the following reasons:—"They are invariably present in vaccine lymph, are uniform in size and other characters, and abound most in the purest and most active lymph; (2) they are the only living organisms found in vaccine lymph; (3) they multiply enormously when the lymph is planted on the calf or human subject, in the vaccinated tissues and subsequently in the vesicles, and this active proliferation is coincident with the active development of vaccinia; and (4), from their resemblance to other specific micro-organisms—for example, those of pneumonia and erysipelas.

For ten years past Dr. Carmichael has been experimenting on the production of artificial lymph, by cultivation. His attempts at vaccination with this cultivated lymph have not been very successful, but sufficiently so to prove the necessity for further research in this direction. He makes, as the results of his investigations the following statements:

"1. We have succeeded in cultivating the vaccine contagium in the form of a crop of micrococci, the progeny of the micrococci of ordinary vaccine lymph. 2. We have found that its failure in 90 per cent of the cases proves it to be of lessened infective power, and for purposes of general vaccination entirely unsuitable. It is of lessened infective power, but not necessarily, when it does succeed, of lessened protective power. It is not, I think, a truly attenuated lymph, because when it does succeed its success is perfect. It is lymph which, by naturalisation in a new soil, has become less infective—that is to say, less ready to germinate than the old. 3. We have succeeded in producing vaccinia in a number of children (10 per cent. of the cases) apparently susceptible, in a special degree, by inoculation of these cultures. 4. These occasional successes serve as a fresh starting point for the renewal of lymph, enabling us, not certainly to obtain a sufficient supply for general purposes of inoculation, but yet enabling us, in a soil not otherwise zymotic, to cultivate the contagium of vaccine lymph, and so to secure a fresh untainted renewal of our lymph."

COMMUNICATIONS TO THIS JOURNAL.

We solicit communications on all subjects of interest to the profession. It is our desire to make this Journal a practical helper to the physician and

surgeon in his daily work, and at the same time to keep our readers abreast of the most recent scientific discoveries of the day as regards medicine. Now that we may succeed in the first of these objects, we feel that we shall need the assistance of the practitioners of this country, wherever and whoever they may be. Any man who has a practice, and who uses his intelligence, must meet with cases which would be instructive and interesting to his fellow-workers. But how few of our medical men think it worth while to contribute short, practical articles, or letters to the Medical Journals of this country. Very few indeed, as is witnessed by the scarcity of such communications in all Canadian Journals. The case is different with the English Journals, and with many American Journals, whose circulation is perhaps no larger, and whose readers we are sure are no more intelligent or scientific than ours.

Long formal articles are not the kind of communications of which we are now speaking. There can be no doubt that the great majority of medical men entertain views on certain subjects, and have methods of treatment which would be very valuable to the profession generally, but which, owing to the reticence of the possessors of such knowledge never see the light. Short, concise, and pointed articles, in which theories are not so prominent as facts, and good results are shown from certain methods of treatment, will be appreciated by all who read medical journals. We take it to be the duty of every medical man to add his quota, however small, to the general fund of knowledge which goes to the improvement of the condition and amelioration of the suffering of mankind.

The Cause of Tetanus.—A short time ago we drew attention in an editorial note to the probability of tetanus being an infectious disease. Lately Drs. Rattone and Carle have reported the results of their investigations on this subject to the Medical Academy in Turin (*Rundschau, Virginia, Med. Monthly*). They give the following case and conclusions:—Towards the end of 1886 a patient died of tetanus in the Hospital of St Maurice, in Turin. Two hours after death the initial lesion and some of the surrounding tissues were cut out, from which a watery emulsion was made. One month later the fluid was examined and found to contain large numbers of bacilli and cocci. Twelve guinea pigs were injected in various organs (nerves, muscles and spinal cord), all of which, with one exception, died in from six to eight days with all the symptoms of tetanus. From these animals pieces of the ischiatic nerve and spinal cord were taken out and again an emulsion made. Some of this fluid was injected into other guinea pigs and all died of tetanus. In order to make these experiments distinctive, animals were injected with putrid and septic matter and strychnine, which gave entirely different symptoms at death. The experimenters conclude that—(1) tetanus is an infectious disease; (2) an animal can be inoculated from a human being; and (3) it can be transmitted from one guinea pig to another.

Pajot on Sterility.—Speaking on the subject of obstacles to fecundity in the human species, Professor Pajot says: "Has the woman an anteversion? Say to her: 'Have the kindness, if you please, every evening when you expect to have intercourse with your husband, not to urinate for five or six hours. Don't ask why; that doesn't concern you. Only don't urinate. You wish to have children? Yes? Well then, urinate after intercourse, and not before.' If she has a retroversion, say to her: 'Madame, when your menses are over, eat plenty of eggs and plenty of rice. Take every night for three or four days a little pill which I am going to give you.' (This little pill contains simply a third of a grain of extract of opium.) 'Manage not to go to stool for three or four days. Then have intercourse with your husband, but don't go to stool till afterward.' You will say that all this is very ridiculous; yet the whole process is entirely rational and is based upon anatomical and physiological principles." This reminds us of the story of the physician's assistant who was consulted by a lady wishing to have an abortion procured. The assistant, who was an Irishman, heard her complaint, and being ignorant of any means to produce the desired result, advised her to "hold her water for three or four days, and she'd drown the little chap out."

The Spontaneous Origin of Scarlet Fever.—It is generally conceded that the ghost of the *de novo* origin of scarlet fever has been laid, but the question crops out here and there even yet. Thus Dr. Newton, the State Dairy Commissioner of New Jersey, writes in *Science*:—"I have often

seen isolated cases of this disease beginning at a time when no other case existed in the city. Many times I have seen a single case begin without any probability of an exposure to another case, but I do not think that we are justified in accepting the theory that the disease may arise *de novo* because of our inability to find the original case. But there is much to lead us to study this side of the question, for filth may be a possible cause."

The statement that *filth may be a possible cause*, is sufficiently unscientific for the most conservative members of the profession. There is no reason to believe that because the source of infection cannot be ascertained, even after the most careful and anxious enquiry, there is, therefore, no source of infection. The wonderful power of life manifested by the virus of this disease, as shown by the distance to which it may be carried, and the length of time which may elapse between the infection of articles of clothing, and the subsequent outbreak of the disease among people who have been brought into contact with such clothing, as well as many recorded instances in which long after the *de novo* theory had been apparently proved, the real cause of the appearance of the disease was made manifest, should go a long way towards confirming our belief in the specificity of the virus, and in Virchow's doctrine, *omnis cellula e cellula*.

Smaller Mortality in Typhoid when treated by Cold Bathing.—In an extensive table of cases taken from the practice of the Red Cross Hospital at Lyons M. Bouveret (*Lyon Méd.*) shows a decided decrease in the death-rate in typhoid, when the high temperature in that disease has been combated by cold bathing.

He divides the past twenty years into three periods, as follows:

I. 1866-1872.....	Death-rate,	26.2	per cent.
II. 1873-1881.....	"	16.5	"
III. 1881-1885.....	"	7.3	"

During the first period the treatment was by drugs and expectancy; during the second, cold baths and drugs having an antipyretic action were used but not at all systematically; during the third, the cold bath was used much more frequently. M. Bouveret compares this reduction to that shown by Liebermiester, at Bâle, which was from 26 per cent. to 8.8 per cent. He also states that the German Military Hospitals give a reduction from 20.8 per cent., to 8.9 per cent. during the ame periods. The public surely needs education on this point, and when in the fulness of time they shall have received it, we may hope to see the death-rate in this disease materially diminished in private practice.

Arsenic in Menorrhagia. -Dr. Palmer recommends this drug (*Med. Rec.*) in two classes of cases: (a) That of growing girls and young women—nulliparæ chiefly—in whom menstruation is not necessarily too free, but appears too frequently and continues too long. A vicious habit of irregularity of menstrual function, from some cause, becomes established, which is highly detrimental to health. Small doses (gtt.iij.) of Fowler's solution, continued during the interval as well as the menstrual time, have rarely failed to correct the irregularity. (b) The menorrhagia of the climacteric, either as to time, quantity, or duration. Here its action is less decided than in the former class, for we all realize that too frequently the aforementioned symptom at the menopause bespeaks some serious organic lesion, often a malignant disease of the uterus. Menorrhagia of malarial origin has a good remedy in arsenic.

Dose of Salicin in Rheumatism. — Dr. McLagan says (*Lancet*) that from the time he first introduced salicin to the notice of the profession (1874), he has never ceased to insist on the necessity of employing *large doses*. Twenty to forty grains given every hour until there is decided evidence of its action, is not too much. He finds that generally before an ounce is taken improvement has taken place, and that as the symptoms decline the dose may be diminished. In Dr. McLagan's opinion, one might as well give one grain of quinine every three hours and expect it to cure intermittent fever, as to give five or six grains of salicin and expect it to cure rheumatism. The frequently repeated and large doses are necessary, because the salicyl compounds are so quickly eliminated that, used in any other way, the patient never really comes under their influence.

Cocaine Applied Locally in Vomiting of Pregnancy.—Dr. Wm. Duncan, F.R.C.S., assistant obstetric physician to the Middlesex Hospital, reports (*Lancet*) three cases of obstinate vomiting

of pregnancy, completely and rapidly cured by the local application of cocaine to the vagina and cervix uteri. In the first place the uterus was markedly anteflexed and tender; in the second it was normal as to position, but tender, while the third was slightly anteflexed. In all three cases the roof of the vagina and the cervix were freely painted with a 15% solution of cocaine, and a plug of cotton-wool soaked in the same solution, was carefully inserted into the cervical canal for about three-quarters of an inch. In all three cases the results were wholly satisfactory. The author wisely draws attention to the danger of causing abortion by the application to the cervical canal, which he advises should be made with great care.

STRYCHNINE AS AN ANTIDOTE TO ALCOHOL.—The benefits derived (*Lancet*) from strychnine in dipsomania, have led another observer to undertake experiments to show what the antagonistic action of that drug is to alcohol. He experimented on dogs, and drew the following conclusions: 1. Strychnine undoubtedly neutralizes the intoxicating and narcotic effects of alcohol. 2. It enables large quantities of alcohol to be taken for a considerable stretch of time without causing the usual organic lesions which follow the use of alcohol alone. 3. There are, however, limits beyond which the alkaloid itself becomes injurious to the organism. 4. Therapeutically, strychnine should be used in all forms of alcoholism. 5. It may be regarded as a powerful prophylactic against alcoholism.

CALOMEL IN SMALL DOSES IN PNEUMONIA.—The use of calomel in pneumonia has been frequently recommended by various writers and clinicians. Some physicians advise its use from the commencement of the disease; others, again, speak of its use in promoting resolution only. In solidification, accompanied with dry tongue and skin, we have derived great benefit from its early use in small doses given often. We usually give about one-twelfth of a grain every hour for forty-eight hours, or until the symptoms are relieved. From what we have seen written on this treatment, and our own experience, we are inclined to believe it reliable. The calomel, however, should not be continued if the bowels become irritable from its use.

NERVE SUTURE.—In the clinical notes of the *Br. Med. Jour.*, a case, operated upon by Mr. Croft, of St. Thomas Hospital, is reported. The posterior tibial nerve had been cut across by a stab. The ends of the nerve were found retracted an inch and a half, but were carefully sutured together with very fine silk, and the wound dressed antiseptically. Twenty-four hours afterwards "sensation was observed to be present all over the foot, but modified in character in the sole." Five weeks later the leg was entirely well, the boy having perfect use of, and perfect sensation in, the foot and leg.

MARRIAGE AND INSANITY IN IRELAND.—The *Lancet* in a review of the Dundrum Criminal Lunatic Asylum (*Am. Jour. of Insanity*) makes note of the curious fact that the single among the inmates are three times more numerous than the married and widowed combined, and adds that this fact is observable in most, if not all, Irish asylums. In the State of New York quite the contrary seems to be the rule, as an examination of the statistics of the Utica asylum shows that the number of single inmates is only about half that of the married and widowed.

ANTIPYRIN IN INSOMNIA.—Dr. Drayton (*Med. Rec.*) mentions the case of a patient in whom he succeeded in obtaining refreshing sleep, after the usual remedies, such as the bromides, chloral, and morphia had proved ineffectual. He gave six grains of antipyrin with two of antifebrin, with the result that she soon became quiet and fell asleep. She slept six hours and awoke refreshed. The antipyrin was continued for four nights with the happiest results, no more sleeplesness having been complained of.

THE WONDERS OF THE TELEPHONE.—A physician reports to us, says the *Medical Age*, December 10th, that he was saved a two-mile ride through a driving storm the other night by having the patient, a child, brought to the instrument and held there until it coughed. He diagnosed false croup, prescribed two grains of turpeth mineral, and turned in for an undisturbed sleep during the remainder of the night. He found the patient in the morning doing nicely—under the care of another doctor.

SWALLOWING ARTIFICIAL TEETH.—Mr. Eglinton writing to the *Lancet*, says a patient of his swal-

lowed her artificial teeth. He endeavored at different times to remove them from the stomach by means of a horsehair probang, but without success. He then administered 20 grs. pulv. ipecac. with 10 grs. zinci sulph. in a cupful of warm tea, and got the patient to eat a few figs. Shortly after she vomited the teeth embedded in the figs. She complained of pain in the epigastrium, which was relieved by a few drops of tinct. opii, and next day she was quite well.

Rheumatism, Muscular or Articular. — A writer in the *Med. Summary* gives the following: This remedy has stood a test of *fifteen* years. It is almost sure.

℞ Citrate of lithia, . . . ʒj.
Citrate of potash . . . ʒj.

Take a teaspoonful in *hot* lemonade with sugar ʒj., and repeat every two hours.

If there is in the domain of medicine a certain cure, this is the remedy. Try it.

Antipyrin in Headache.—Dr. Davies, in a communication to the *Lancet*, says he has found antipyrin in doses of ten grains repeated every hour for two or three hours, then at intervals of six hours for a day or two, extremely useful for headache due to worry and over-work. He states that it leaves no ill effects, and that it tends to prevent recurrence of the trouble.

Heat Centres in the Cortex Cerebri.—Dr. Ott, in a preliminary note to the *Medical News*, says he has discovered a heat centre about the unction of the supersylvian and postylvian fissures. When this portion of the cortex is destroyed, a rise of temperature occurs which persists for several days. His experiments were made upon the lower animals.

British Diplomas.—Dr. A. M. Ewing (Trin.), has taken the M. R. C. S. Eng.

Coroners.—Dr. Grant, of Perth, has been appointed associate coroner for the County of Lanark.

Dr. Asa Gray the celebrated botanist has reached the age of 77 years. He now lies ill at his home in Cambridge, suffering from an apoplectic seizure from which it is not expected he will recover.

Mr. Lawson Tait, has been appointed to the chair of gynecology in Queen's College, Birmingham.

Books and Pamphlets.

A Practical Treatise on Materia Medica and Therapeutics. By Roberts Bartholow, M.A., M.D., LL.D., Professor of Materia Medica and Therapeutics in the Jefferson Medical College of Philadelphia. Sixth Edition, revised and enlarged. 8 vo. pp. xxiv, 802. New York: D. Appleton & Co. Toronto: Carveth & Co. 1887.

A work which has reached its sixth edition in a little over ten years, requires no commendation. As a text-book as well as a book of reference for the busy practitioner, it has obtained on its merits an established popularity. From a careful perusal we are thoroughly convinced that this sixth edition will in no way diminish its acknowledged value. The author has given the work a thorough revision, considerably enlarging the book, and has brought to bear a lengthened experience, not only as a teacher of Materia Medica, but as an author of various other medical works, in its pages. His facility of stating comprehensive facts in few words is seldom equalled, and his ripened judgment in selecting the really valuable from the innumerable host of new remedies so persistently pressed upon us by their ardent advocates, demands our admiration. To those whose time will not permit almost continuous reading of the medical journals, a work of this kind is invaluable, if they would keep abreast of the most advanced views and desire benefit from the more recent discoveries in the ever-changing materials of medicine.

Fever Nursing, for the use of professional and and other nurses, and especially as a text-book for nurses in training. By J. C. Wilson, A.M., M.D., Visiting Physician to the Philadelphia Hospital, etc., etc. Philadelphia: Lippincott & Co. Toronto: Williamson & Co. pp. 201. $1.00. 1888.

This little book should be in the hands of every nurse in the country. The author is evidently a teacher, and knows how to present his thoughts in a concise and lucid manner. The language is within the comprehension of any one fit to act as nurse. Not only does he instruct *how* a given fever should be managed, but he also, so far as is possible, tells *why* such methods are adopted, giving the attendant a rational interest in the outcome of her service. The book will be read with interest and profit, not only by nurses, but also by the practising physician.

Operative Surgery on the Cadaver. By Jasper Jewett Garmany, A.M., M.D., F.R.C.S. 8vo. 150 pages. Cloth. New York: D. Appleton & Co. 1887. $2.00.

This work is well written. The directions for performing operations, such as amputations, ligations, disarticulations, etc., are clear and concise. The work is not intended to take the place of manuals which treat of operations on the living, but rather to place the technique of such operations before the student or practitioner, so that, having practised them properly upon the cadaver, he may approach them with greater confidence and skill when called upon in his official capacity to deal with the living. The practice of giving demonstrations in operative surgery upon the cadaver, as well as of allowing students to perform various operations, is well thought of and considerably practised in England. To all who wish to take such a course, the work before us will be invaluable.

Insanity: Its Classifcation, Diagnosis and Treatment. By E. C. Spitzka, M.D., President of the New York Neurological Society, etc. 8vo, pp. 423. New York: E. B. Treat, 1887. Price, $2.75.

Insanity is a subject so little thought of by the general physician, and so little understood by him, that this book will be of great use. It contains numerous original ideas, and the author does not fear to differ from some of the long accepted classical ideas of alienists. He also expresses his opinions positively, a great treat for the general professional reader in this branch of medicine. As a summary of the latest ideas on insanity, the book is excellent. The method of examining the insane is well treated, as also the part on differential diagnosis. We heartily recommend the book as being one of the most useful that have lately issued from the press.

The Medical News Visiting List; a Daily Record of Practice and Accounts, without the use of signs, and thus obviating the need of transferring. Arranged in removable tablets. Philadelphia: The Medical World. 1887. $1.50.

The object of this innovation in visiting lists is to save practitioners the trouble of carrying bulky books for recording their daily business, and to make the accounts legal by using words instead of signs. So far as we can judge from an examination of the proposed system, it will accomplish the above object, by the aid of a companion which is soon to appear as a "Ledger of Monthly Balances." This is a book of 160 pp., leather bound, and alphabetically arranged, so that each account may be readily found. Its price is to be fifty cents.

A Manual of Organic Materia Medica for the use of Students, Druggists, Pharmacists and Physicians, by John M. Maisch, Phar. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. Third edition, with 257 illustrations. Philadelphia: Lea Bros. & Co. 1887.

This work has always been a popular one with the Pharmaceutical profession, and the present edition has been so improved as to render it still more valuable. It presents in a concise form the essential physical, histological and chemical characters of the organic drugs, rendering it a useful and reliable guide to business transactions.

Reference Handbook of the Medical Sciences, embracing the entire range of Scientific and Practical Medicine and Alied Science, by various writers. Illustrated by chromo-lithographs and wood-engravings. Edited by Albert H. Buck, M.D. Volume V. New York: William Wood & Co. 1887.

Volume five of this comprehensive work is to hand and is fully up to the standard. Among the contributors may be mentioned Alt, of St. Louis, Buck, of New York, Henry C. Coe, of New York, Graham, of Toronto. The work is well done, and ably edited.

Vick's Floral Guide for 1888.

This annual guide is to hand, and contains even more than the usual amount of information about plants and flowers. It will be sent to any address on application to James Vick, Rochester, N.Y.

Births, Marriages and Deaths.

On 28th December, Dr. J. Harrison Howell, of Shedden, Ont., to Julia J., daughter of J. H. Reckie, of Cannington.

On the 13th December, Dr. F. D. Canfield, to Florence A., daughter of James Noxon, all of Ingersoll, Ont.

On the 19th January, Dr. McCrimmon, to Isabel, fourth daughter of D. McKenzie, all of Kincardine.

On 31st December, at Little Britain, Dr. W. N. Whiteside, late of Beeton.

THE CANADA LANCET.

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Original Communications.

TWO CASES OF UN-UNITED FRACTURE.

BY N. E. M'KAY, M.D., C.M., HALIFAX, N.S

(Surgeon to V. G. Hospital).

CASE 1.—A. R., aged 18, single, a miner, was admitted into the Hospital, on the 31st August, suffering from an un-united fracture of the left humerus.

History obtained from Patient:

The patient while working at Spring Hill coal mines, jumped off a car in motion, a rope swinging around struck him on the left arm and knocked him insensible. When he recovered consciousness, he found he could not move his arm. A doctor was at once sent for, who diagnosed a fracture of the left humerus below the insertion of the deltoid muscle. The fracture was at once set, and the splints in which the arm was first put up were left undisturbed for nine weeks; they were then removed and the bones were found un-united. The arm was thereupon put up in plaster of Paris bandage, which was removed in eight weeks, and the fracture again found un-united. A consultation was then held, at which it was decided to slightly irritate the ends of the fragment by gently rubbing them together. This was done and the arm was put up in a plaster of Paris bandage for four or five weeks. When the splint was taken off, no union was found to have occurred. He then came to the hospital for treatment.

When admitted, patient was in very good health. The left humerus was found, on examination, fractured below the insertion of the deltoid, and the arm about one inch shorter than the other. He was unable to move his arm. A consultation of the medical staff was held on the 6th of Sept., at which it was decided to re-set the bones and wire them. On the 8th of September I operated in the following way. The patient being etherized and an Esmarch applied, I washed the parts thoroughly with a carbolic solution, 1 in 40, and made an incision 3½ inches in length over the seat of fracture, and in line with the outer border of the biceps and brachialis anticus muscles. On cutting through the integument and some areolar tissue, the cephalic vein was exposed and held to one side by an assistant. I then laid the border of the brachialis anticus muscle bare, and followed it down to the bone. The soft structures being now held well apart by two assistants, I laid open the periosteum and denuded the ends of the fragments. The ends of the bone being pushed through the wound, I removed a short piece from the end of each, at right angles with the axis of the shaft, and drilled a hole through each fragment from its periosteal surface, and brought their vivified surfaces together, and held the bones in position by silver wire. The hemorrhage was then checked and the wound washed with a carbolic acid solution, 1 in 40, and its edges were held in coaptation by catgut sutures, a drainage tube being first inserted. The arm was then put up in a rectangular splint, a trap being left over the wound to enable it to be dressed without disturbing the parts. It took over an hour and a half to perform the operation, which was done under a spray of carbolic acid, and with complete antiseptic precautions.

On the 10th of September, the 2nd day after the operation, the wound was dressed under the spray. It looked well; I removed the drainage tube and left it out; there was no discharge. On the 16th of September, the 8th day after the operation, the wound was again dressed under the spray, and the stitches were removed, union having taken place by first intention. On the 16th of October, when the splint was removed, good bony union was found to have taken place. The patient's temperature remained normal throughout.

On the 18th of November, as the patient was walking on the platform in front of the hospital, with his hands in his pant's pockets, his feet slipped and he fell heavily on his left side and refractured the humerus.

The arm was at once put up by the house surgeon on a rectangular splint, and left untouched

for about 20 days. This splint was removed on the 10th December, and union found to be quite firm. I now put the arm up for two or three weeks in a plaster of Paris splint, which was made so as to embrace the shoulder. The patient was discharged, cured, on the 12th of January.

CASE II.—W. B., A teamster, aged 36, married, was admitted into the hospital on the 7th of October, 1886, suffering from an un-united fracture of the right femur.

History obtained from Patient.

On the 12th day of October, 1885, as the patient was driving a fish waggon, the horse took fright and ran away, throwing the patient forcibly on his right side on the hard sidewalk. On attempting to get up, he found he could not move his right leg. He was at once taken into the Wellington Barracks, where an army surgeon examined his leg and diagnosed "a fracture of right thigh," and put the fracture up temporarily to enable him to be carried home with safety. When he got home a doctor was immediately sent for, who put the leg up on a long side splint with an extension, and seven days after, applied short splints. For the next six or seven weeks the doctor assured him his leg was doing well. The splint was then removed, and to the surprise of the surgeon the bones were found un-united and the limb fully three inches shorter than its fellow. The leg was now put up for seven or eight weeks on a double inclined plane, which on being removed, the fracture was again found un-united, and the knee considerably swollen and very tender to the touch. During the following two or three weeks the limb was put up on a large side splint, for which a plaster of Paris spica bandage was subsequently substituted. This splint was left on for four or five weeks; it was then removed and no union found to have occurred. For the next eight or nine weeks the patient was allowed to go about on crutches. An operation was now performed, which consisted in subcutaneously irritating the ends of the fragments, and the leg was put up for twenty-five or thirty days in a plaster of Paris spica bandage; on removing this splint the bones were still found un-united. After this he was allowed to go about on crutches, and nothing was done for him until he came into the hospital. I saw the patient for the first time, seven or eight weeks after the accident, in company with Dr. F., the attending surgeon. Liston's large side splint and the extension were taken off in my presence; I measured the limb and found it fully three inches shorter than the other, and there was no attempt at union of the fragments.

On examination, the right femur was found fractured about two inches below the trochanter minor, and the limb fully 3½ inches shorter than the other. The knee was anchylosed in the straight position, and tender to the touch. On letting his weight on the leg the bones glided easily over each other, and a distinct angular bend was produced in the thigh at the seat of fracture. The hip-joint was semi-anchylosed. There was no callus formed about the ends of the fragments. His general health was good.

On the 9th of October, a consultation of the medical staff was held, at which it was decided to re-set the bones.

On the 11th, I operated in the following way:—The patient being put under the influence of ether, and an Esmarch bandage applied, I washed the parts thoroughly in a carbolic solution (1 to 20) and made a vertical incision down to the bone, six or seven inches in length, on the outer aspect of the thigh, beginning about ½ an inch below the upper border of the trochanter major; and made a second incision two inches in length, extending backward from the centre of the former and in right angles to it. On exposing the bones I found them overlapping fully three inches and bound tightly together by strong fibrous material. The lower end of the upper fragment was drawn upwards and forwards by the conjoined tendon of the psoas and iliacus, and the upper end of the lower fragment drawn up behind the other, pressing hard against it, and producing atrophy of it. The ends of the bones were very much atrophied and pointed, especially the end of the upper fragment. The periosteum being now laid open and the ends of the bones denuded, I applied extension and counter-extension to the limb by pulleys, and removed by a finger saw—the soft parts being first held well apart and protected by spatulæ—about an inch and a half from the end of each bone, and drilled a hole through each of them from its periosteal surface. I then brought the bones in position and held them there by stout platinum wire. The wound was washed thoroughly with a carbolic

solution (1 in 40); a rubber drainage tube was inserted, and the edges of the wound were brought into perfect coaptation and held there by silk sutures; a Lister's dressing was then applied and the limb put up on a single inclined plane. Owing to the semi-anchylosed condition of the hip-joint and the shortness of the upper fragment, and also the very small size of the ends of the bones, I found great difficulty in getting the bones into proper position, and in keeping them there during the after treatment of the case. The operation which was a very difficult one, occupied three hours, and was performed under a spray of carbolic acid, and with strict antiseptic precautions. On the afternoon of the day after the operation, his temperature rose to 100°, and on the afternoon of the second day it stood at 102°. From this time it began to gradually decline until the 17th day of October, the fifth day after the operation, when it stood normal and remained so. On the 14th of October, I removed the blood-stained dressing under the spray; the wound looked well; there was no discharge from it. Owing to the close proximity of the edge of the splint to the wound, I found it impossible to dress it antiseptically without disturbing the parts; and to overcome this difficulty I removed the inclined plane and applied a Crofft's splint to the anterior aspect of the limb, extending from the ankle to about two inches above the highest point of the crest of the ilium; and a thin narrow wooden splint, well padded, to its posterior aspect, extending from the tuber ischii to the ankle; and to doubly secure the bones in position, I applied over Crofft's splint, one of malleable iron, 1 inch by $\frac{1}{4}$ of an inch, extending from a little below the knee to about three inches above the crest of the ilium, and shaped to fit the limb. These were held firmly in position by plaster of Paris bandage, a trap being left to dress the wound, and the whole was suspended in a Salter's swing.

On the 19th day of October, the eighth day after the operation, I again dressed the wound under the spray, and found union had taken place by first intention, except a small portion in the centre of the wound. There was a little discharge of pus from the opening, and it continued to discharge a little until about the middle of November following. On the 21st of November the splints were removed and firm bony union found to have taken place. A spica of plaster of Paris was now put on and the patient allowed to go about the ward on crutches. On the 1st of January, the plaster bandage was taken off, and a Thomas' splint for hip-joint disease substituted for it. On the 16th of Januaay he was discharged cured. The limb was about $3\frac{3}{4}$ inches shorter than its fellow. Patient objected to have any attempt made to restore motion in the knee joint. At the time of writing this article he is able to walk without crutches.

NOTES ON ACETANILIDE.*

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Acetanilide or antifebrin, although one of the latest additions to the list of antipyretics, can hardly be looked upon now as an untried remedy. The frequent references to it in the medical periodicals indicate that it has had extensive trial.

There have been of late so many new therapeutic agents, or new applications of those already in use, heralded forth as great gains in the treatment of disease, and which have, after a brief existence, been found wanting, and disappeared like meteors below the therapeutic horizon; that the great mass of the profession are prone to regard new remedies with some suspicion; hence my apology for relating, so limited, an experience with this remedy, is that we may be favored with the views of the members of this Society who may have tested its actions.

In August, 1886, Drs. Cahn and Hepp, of Prof Kussmaul's clinic, Strasburg, published in the *Centralblatt für Klinische Medicin* a resumé of what they had discovered as being the actions of acetanilide. The drug, which may be prepared by the application of heat to anilineacetate, had already in 1853 been produced by Gerhardt, by the action of aniline on acetylchloride, or anhydrous acetic acid. It is a white, scaly powder, resembling santonin; odorless, slightly pungent, insoluble in cold water, sparingly in hot, but readily in alcohol. It melts at 113° C. and distils unchanged at 292° C., is neither acid nor alkaline, and resists the majority of reagents. It belongs to the group phenylacetamides or acetanilides, wholly different from those

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containing the majority of antipyretics, as the phenols, which have carbolic acid, hydrochinon, resorcin, salicylic acid, or the chinoline order, which contains chinolin, kairin, antipyrin, quinine and thallin. To discover adulteration with aniline, which is *poisonous*, Yvon recommends adding hydrobromide of sodium to acetanilide, rubbed up with water. If aniline is present, a reddish-orange precipitate is found, if pure it will remain clear. Treating it with mercuro-nitrate produces a green coloring matter, soluble in alcohol.

Actions claimed for it. That in an hour after administration the temperature will begin to fall, reaching its maximum in about four hours after, when, in proper doses, normal temperature is reached or lower, its effect passing off in three to ten hours, the fall in temperature being accompanied by redness of the skin and perspiration. The pulse is reduced simultaneously and arterial tension raised; it produces no untoward effects; no nausea, vomiting or diarrhea, the appetite improving under its use. That it calms the nervous system, inducing sleep; relieves pain, headache, etc.; acts in doses of from four to fifteen grs., four grs. being equal in effect to sixteen grs. antipyrin.

Dr. Weill, a pupil of Dujardin Beaumetz, in the *Bulletin Générale de Therapeutique*, gives these conclusions: "Acetanilide exerts a predominant influence on the nervous system, manifested by collapse, after a short period of excitement; generalized anesthesia and analgesia, increased intravascular pressure and peripheral vaso-constriction; in toxic doses, progressively reduces oxyhæmoglobin, and finally changes it into methæmoglobin, and that it is of great utility in subduing morbid over-excitability in nervous diseases."

It has but little action in modifying temperature in health; large doses may cause death (25 to 50 centigrammes per kilogramme of animal). Symptoms are; stupor, prostration, fall of temperature, depression of respiration, analgesia, anæsthesia, collapse. Animals experimented upon lived 24 to 36 hours; it is not, according to Miquel, antiseptic. Its antithermic action is unequal, disease and idiosyncrasy having a marked influence on its action; it sometimes causes cyanosis, which does not appear to be harmful.

Dujardin Beaumetz and Prof. Charcot consider it superior to every other medicament in pain linked with nerve alteration, and regard it superior in rheumatic neuralgia, muscular and articular pains, to salicylic acid. It is especially useful in the painful crises of locomotor ataxia, but loses its effect in two or three weeks. This is corroborated by Fischer, of Cannstatt, and Lepine, of Lyons, who recommends 30 gr. doses if necessary; no ill effects result in non-febrile states. Fischer found it of decided advantage in affording amelioration in all forms of paroxysmal pain. Professor Dujard in Beaumetz did not find it of much service in epilepsy.

Dr. Gabriel Pavai Vajna regards it as superior to quinine in phthisis and equal to salicylic acid in acute rheumatism. It is inexpensive, being only 10 francs per kilogramme in France. Most of these effects were illustrated in the twenty cases in which I have administered it. Nine were cases of typhoid fever, in all of which the temperature was promptly reduced. The following case may be regarded as typical of its action in this disease:

CASE IX. Girl, aged 9; Oct. 25th was seventh day of fever; at 5 p.m., five grs. acetanilide were given, when pulse was 120, respirations 28, and temperature 105⅖°.

	Pulse.	resp.	temp.	
5.00 p.m.	120,	28,	105⅖°	—Face and general surface pale, dry, and hot.
5.10 "	120,	28,	105°	—Pink flush on both cheeks, pulse stronger.
5.20 "	120,	32,	104⅗°	—Forehead, neck and trunk moist, and whole surface of reddish hue; somewhat more restless.
5.30 "	112,	32,	103⅗°	—Has become tranquil and fallen asleep; skin moist, no visible perspiration.
6.00 "	120,	30,	102⅖°	—Surface in same condition; still sleeping.
6.30 "	108,	24,	100⅖°	
7.00 "	102,	24,	100°	—Asked for a piece of bread.
7.30 "	102,	24,	100°	
8.00 "	108,	25,	100⅖°	—Skin has become dry.
8.30 "	108,	30,	101°	—Pulse diminished in volume and of less force.
9.00 "	112,	30,	101⅖°	
9.30 "	112,	30,	102⅖°	
10 00 "	116,	28,	102½°	
10.30 "	120,	30,	103½°	
11.00 "	120,	32,	103°	
1.20 a.m.	120,	30,	103⅗°	

Oct. 26, 11 a.m.,—Mother states child appeared to be very feverish from 12 to 8 a.m., and was restless and drank milk frequently. Six grs. were

given to-day; same effects observed, only there was more perspiration, and temperature became normal, remaining so for only an hour. Temperature subsequently rose on the 30th to 106°, and on the 31st to 106⅘°, but was always reduced to about normal; but the doses were increased to 8 grs. Three and four doses were required in the 24 hours to keep the temperature at or about normal, child resting quietly after each dose and taking nourishment freely at present date, Nov. 7th. It would seem in this case that the temperature, after the effects of acetanilide have passed away, rose higher through its action. An unusual degree of anemia was present when the period of convalescence arrived.

Case I.—Boy aged 12, typhoid. Oct. 20th, 1.30 p.m., ninth day of fever, pulse 120, temperature 104⅘°; five grs. reduced temperature to 98⅘° in three hours. This dose acted in the same manon the 21st and 22nd. Did not again rise above 102°, and gradually declined.

Case II. has a similar record, and also Case XVI.

Case III.—Young lady, aged 29 years, mild typhoid. Sept. 11th, tenth day; has had troublesome headache since she became ill, and could not sleep during last two nights. Six grs. acetanilide were given at 10 p.m. Patient fell asleep in fifteen minutes and slept all night, and was free from pain when she awakened; it returned the two following days, but was slight.

Case IV.—Lad, aged 12, typhoid. On March 28th, the twenty-seventh day of fever, temperature was 104⅘°. Six grs. acetanilide caused a profuse perspiration and slight cyanosis. Subsequently 4 grs. reduced the temperature below normal; 3 grs. was found to be a sufficient dose. After April 1st, temperature gradually came down to normal.

Case V.—Young lady, aged 19, mild typhoid. The severe headache was also promptly relieved by 6 grs. acetanilide; did not return.

Case VI.—Boy, aged 9, double lobar pneumonia. June 13th, pulse 144, respirations 48, temperature 105⅘°; 5 grs. acetanilide reduced temperature to normal in three hours. In five hours after dose, pulse 120, temperature 100⅘°, respirations 32. 14th, 1 p.m., pulse 140, respirations 44, temperature 106°; at 2 p.m., 5 grs. were given; at 5 p.m., temperature 97⅘°, and at 9.30, pulse 132, temperature 102⅘°, respirations 36. 16th, 5 grs. at 2 p.m. reduced temperature from 105 to 101⅘° in three hours; 11 p.m., pulse 112, temperature 102⅘°, respirations 56. 19th, 11 a.m., respirations 68, pulse 120, temperature 103⅘°. 20th, temperature normal.

Case VII.—Septicemia (Puerperal). Patient aged 37, her first child. Forceps used and artificial extraction of placenta; antiseptic uterine douches were used and iodoform suppositories. Temperature was not high until the tenth day; 104°; on the eleventh day 8 grs. acetanilide reduced temperature to normal. Did not rise again above 102°; curette used on the thirteenth day; in two days after, temperature was normal, with slightevening exacerbations.

Case VIII.—Young man, aged 23, pneumonia (double). On Oct. 16th, sixth day, pulse 120, respirations 64, temperature 103⅘°; 8 grs reduced temperature, causing profuse perspiration. 17th, 1 p.m., temperature 102⅘°; 8 p.m., temperature 99⅘°, pulse 90, respirations 36.

Case X. has much the same record as case IX.

Case XI.—Puerperal Septicemia. Patient confined in a house where there was a case of erysipelas in next room. All antiseptic precautions were observed, but next day temperature was 105⅘°; uterine douches of corrosive sublimate, followed by carbolic acid and then iodoform suppositories were used; 8 grs. acetanilide brought temperature to normal, with profuse sweating. This dose was repeated on the two following days, after which there was no further elevation of temperature.

Case XII.—Nervous headache, lady aged 28, had lasted two days; 5 grs. acetanilide gave complete relief in about two hours. Same results in two subsequent attacks.

Case XIII,—Erysipelas. Boy aged 15. Oct. 27th, noon, 7 grs acetanilide were administered; temperature was 104⅘°. In three hours temperature was still 103°; 8 grs. were then given; in two hours temperature was 102°. 28th, 2.30 p.m., pulse 110, temperature 105⅘°; 15 grs. acetanilide were given. In 3½ hours temperature was 100°; in 4½ hours after, respirations 20, temperature 99⅘°; perspiration has ceased. For several days these large doses were required to keep temperature down; no fever Nov. 2nd.

Case XIV.—Lady, aged 22, one day ill. Severe headache, general soreness, pains in back, anorexia, coated tongue, and temperature 104⅘°; 8 grs.

acetanilide at 10 p.m., purgative in morning. Went asleep shortly after taking powder. Temperature next day normal; no headache; feeling quite well.

In CASE XV, typhoid, young man aged 21, half-hour record of temperature was kept on the two occasions when it was administered, with results similar to Case IX.

The latest accepted theory as to the cause of fever, according to H. C. Wood, Macalister, of Glasgow, and others is, that it is a disturbance of calorification in which through the nervous system, heat production and heat dissipation are both affected; that there is a nervous centre which inhibits the production of heat and a thermogenic centre (located by Aronsohn and Sachs at the inner side of the corpus striatum), which excites tissue change; that heat dissipation is regulated by the vaso-motor nerves; that temperature is no indication of the amount of fever, as heat production may be normal, but elevation of temperature result from diminished heat loss, and we may have increased heat production (pyrexia), but owing to accelerated heat loss, no elevation of temperature, hyperpyrexia ensues when heat production is increased, with lessened heat loss

Antipyretics act either by lessening the production of heat, as quinine, salicylic acid and the cardiac and vascular depressants, or by increasing the loss of heat, as alcohol, sudorifics, antipyrin, etc. Acetanilide belongs to the latter group.

From the reports of these cases we can learn: That acetanilide in proper doses will, in the elevation of temperature of typhoid fever, pneumonia, erysipelas, septicemia, and doubtless other febrile states, bring about a state of apyrexia, or a subnormal temperature if the dose is larger, in from two to four hours; the temperature beginning to fall usually in from ten to fifteen minutes after its administration, instead of an hour, as hitherto usually reported; the reduction is ordinarily 5° or 6°, and may be over 8° (Case VI. 8⅘). The dose varies from 6 to 15 grs. for an adult, is easy of administration and best given in wine or simple elixir. In an hour or two after the lowest temperature the dose produces is reached, it again begins to rise and in four to eight hours may be as high as before the dose was taken; or it may not run as high again for several days, or even throughout the illness.

Idiosyncrasy or individual susceptibility to the action of acetanilide varies considerably, and in cases where there is not any apparent evidence for anticipating dissimilar effects. Disease also exercises a modifying influence. Cases of erysipelas require larger than ordinary doses. Hence it is advisable to begin with small doses and increase, if necessary, until the quantity which will bring the temperature down to normal, is learned. It first stimulates the vaso-motor (constrictor) system, leading to increased arterial tension, quickly followed by dilatation of the cutaneous arterioles, thus permitting increased radiation of heat; perspiration immediately supervenes and the temperature rapidly declines, with lowered arterial tension. It is an analgesic, giving speedy relief in neuralgic pain and headache, being especially serviceable in the headache present in the early stages of typhoid fever. It is also a reliable hypnotic and nervous sedative in the sleeplessness and excitability of febrile states. It doubtless, in over doses, as evidenced by cyanosis, inhibits the respiratory functions of the blood, probably as has been explained, by so modifying the hæmoglobin, that less oxygen is conveyed by the corpuscles, and a state of internal asphyxia ensues; the diminished oxidation resulting in lessened heat production. It has no influence in shortening the course of zymotic affections; hence in typhoid, would not consider its administration indicated unless the evening temperature was over 103° F., the dose to be repeated every six hours as necessary. No untoward effects result when proper doses are given; on the contrary, it is almost an invariable remark of patients taking the remedy that they feel better, and in a state of apyrexia, may experience hunger. Even in over doses the temporary cyanosis is quickly recovered from without any evil result.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

THE CHEYNE-STOKES RESPIRATION.

What seems a lower depth of absurdity, if possible, has yet to be reached in the explanations of the Cheyne-Stokes respiration. I quote here from Dr. L. Sansom's "Physical Diagnosis of the

* Read before the Physiological Section of the Ninth International Medical Congress, held in Washington, September, 1887.

Heart," (*a*) by whom Traube's theory on this subject is said to be "the most plausible." According to Traube, "the first thing which occurs is the establishment of a condition of impaired irritability of the respiratory centre through mal-oxygenation; the long respiratory arrest gives time for the accumulation of carbonic acid in excess in the blood. Arrived at a certain maximum this begins to stimulate, slowly and imperfectly at first and afterwards in increasing degrees, the centre, so that it develops the respiratory efforts till they culminate in dyspnea. Then as the centre ceases to be stimulated or becomes exhausted, dyspnœa again supervenes."

It will be observed that here the *deficiency* of oxygen and subsequently the *presence* of carbonic acid are made to play opposite and antagonistic parts! The lack of oxygen (instead of stimulating the medulla, as supposed by Dr. M. Foster) first enfeebles the respiratory centre, in the medulla, and then the same blood, still deficient in oxygen, but now loaded with carbonic acid, counteracts the previous depression, and tones up the weak nerve centre, so that ere long it displays extraordinary activity. But, unfortunately, this exhilarating pabulum—carbonic acid—is soon exhausted, and the nerve centre resumes its former feebleness till a new supply can be procured. The physiologist is certainly quite impartial, and allows the rivals to have their "innings," turn about. How such nonsense as this "most plausible theory" could find a place in physiological literature seems explicable only on the exigency of the hypothesis so long in vogue.

Filehne's theory in explanation of this state is more complicated, and at least equally absurd. Instead of the respiratory centre being stimulated (as Traube says), it is the vasomotor centre which is excited by the presence of carbonic acid. Arterial contraction follows till "a gradually increasing anemia of the respiratory centre" is brought about. This anemic condition excites the respiratory centre "and inspiration becomes more and more deep," till oxygen is supplied to the blood; "the arterial spasm is thus relieved," owing to the freshly oxygenated blood failing to stimulate the vasomotor centre (so as to contract the arteries), as the carbonic acid had previously done. With the relief of arterial spasm, and a consequent normal dilation of the arteries, "the anemia of the respiratory centre passes off, and with it the exaggerated impulse to respiration, and breathing once more becomes superficial." (*b*) In other words the respiratory centre functionates best when it is supplied not only with non-arterialized blood, but when it has too little even of that; as soon as the anemia passes off, and this nervous centre gets a fair supply of blood, it ceases to act—suspends business—till the better times of bad blood and deficient blood come round again, when it is moved to activity once more!

There is still another explanatory theory to be noticed, which I find referred to editorially in the CANADA LANCET for February, 1886: "Bramwell, who follows the teaching of M. Foster and others, supposes that the respiratory centre consists of two portions, one accelerating (or motor), and one inhibitory. He further believes that these two portions are acted on in opposite directions by the blood, whether arterial or venous. Thus while venous blood stimulates the discharging cells of the centre and depresses the inhibitory portion, arterial blood acts in exactly the opposite direction." At the close of the period of apnœa, the discharging portion of the centre is stimulated by the venous blood," with its excess of carbonic acid, and this same blood, at the same time is depressing the rival, or inhibitory part of the centre. The motor or discharging portion of the centre triumphs; respiration becomes established and even exaggerated. Unhappily, the victor fails to "hold the fort." As soon as the blood becomes "fully oxygenated," the "inhibitory portion becomes stimulated and gradually overpowers the discharging portion," so that "the respirations grow weaker and weaker until the state of apnœa results." Then the suspension of breathing restores the venous character of the blood and accumulates a store of carbonic acid, the stimulation of which reanimates the centre previously depressed by the presence of oxygen in the blood. Such appears to be the scope of this theory.

In this, as in the previous explanations, arterial blood is made to play the part of a depressor and paralyzer of the respiratory process, which it is constantly tending to arrest; but while paralyzing

(*a*) P. 37.

(*b*) P. 137.

one portion of the respiratory centre it is stimulating another; and a similar double character is attributed to the action of venous blood. Thus during the brief time from the beginning of apnœa to the culmination of dyspnœa—a period rarely exceeding one minute—the blood passing to the brain is called upon to exert four different and even diverse effects; first as venous blood stimulating one part of the respiratory centre and paralyzing another portion of the same centre; reverse effects being produced by the same blood on its becoming oxygenated. One is really at a loss to understand how such an explanation could have been admitted to a place in physiological literature. Again it is the exigences of an erroneous theory which have led to such a complicated and unsatisfactory hypothesis. If it be asked how the state of apnœa is induced by forced vigorous respirations, if it be not due to an excess of oxygen introduced into the blood, and how the opposite condition or demand for air by breathing seems to attend the absence of oxygen and the presence of venous blood, I can only answer as to the last that if no better explanation than that venous blood is a stimulant has yet been found some better explanation is surely to be looked for. And as to the state of apnœa referred to, I find Dr. Austin Flint stating that "according to Hoppe-Seyler, apnœa, in the limited sense above mentioned, is to be attributed, not to an excess of oxygen in the blood, but to fatigue of the respiratory muscles." (*a*)

A NEW THEORY SUGGESTED.

Dr. Sansom regards the condition of the respiratory centre in this case as one of paresis and direct exhaustion. He shows that during the apnœal period "the arteries are strongly contracted." The proof of this is found in the rise of arterial tension in the depression of the "great fontanelle" of the head, and also in the arrest of the process by the inhalation of nitrite of amyl, which dilates the arteries. On the theory of these pages, arterial contraction is due to vasomotor nerve depression or paralysis; and accordingly we find here that the vasomotor centre, as well as the respiratory centre, is depressed in function. It has been amply shown above, that contraction of the arteries occurs in the dying and is complete in death. It is also one of the prominent phenomena during the last stages of asphyxia and is invariably attended by venous fullness. The condition present during the stage of apnœa in the Cheyne-Stokes respiration, with its contracted arteries and dilated veins, appears to correspond very closely to that present as death approaches and in the latter stages of asphyxia. The original paretic and exhausted condition of the respiratory and vasomotor centres is aggravated by the further depression caused by mal-oxygenation of the blood; which, when venous and loaded with carbonic acid, is invariably a depressing, and never a stimulating agent to nerve function. Vasomotor nerve failure induces contraction of the arterioles, systemic emptiness and venous engorgement, as the foregoing examples abundantly prove; and as a consequence, the great mass of blood "becomes lodged and hidden as it were" in the great venous trunks. At that moment death is very near, but as the heart continues to beat, it is fair to assume that a small quantity of blood still finds its way through the lungs, and, from its very scantiness, is capable of being ærated by means of the exchanges of gases still going on in the lungs, owing to the presence of residual air during the temporary, partial or complete arrest of respiration. As a consequence the quantity of blood reaching the nerve centres, though small, is at least partially oxygenated, and serves to revive the function of these centres "imperfectly at first," but with momentary improvement. The effect of this revival on the vasomotor centre, is to facilitate the dilation of the arterioles; in which the pulmonary vessels share, permitting, ere long, the inrush of venous blood from the distended vena cava and portal system, and its transmission onwards through the heart and lungs. This corresponds to the period of increase in respiratory function, in which the laborious efforts of a feeble mechanism have been mistaken for an "exaggerated impulse" from excited and overacting or "exploding" nerve centres. Meanwhile, impure blood from the venous reservoirs (finding an entrance through the now fairly dilated pulmonary vessels) begins to fill the lungs in such a quantity (as it is drawn onwards by an inequality of pressure, towards the as yet unfilled arteries) that the whole mass of blood, failing to be arterialized with sufficient rapidity, again becomes unfit for the

(*a*) Prac. of Med., 5th Ed., p. 70.

maintenance of nerve-function and the perpetuation of processes depending upon it.

In such a case a previously weak organ or centre is the first to suffer. The medulla oblongata is such an organ in this case, and its contiguous centres for respiration and circulation fail together; bad blood and deficient blood, acting on centres previously paretic or enfeebled, have done their work, and again the respiration is suspended. The vasomotor centre is again so functionally weakened that it loses control of the arterial muscle—the "inherent contractile force," which all physiologists assign to muscular tissue, thus freed (as in the example enumerated above) induces "the strong arterial contraction" referred to by Dr. Sansom, which contraction of the artery is all the stronger the nearer nerve force is to cease in the extinction of life. This arterial, or systemic contraction, again empties the lungs and refills the venous reservoirs from which the blood is again drawn, at first slowly and then again more rapidly, as the process repeats itself. Here, then, is an explanation of the Cheyne-Stokes respiration based upon sound, though as yet unacknowledged, physiological principles according to which paretic and enfeebled nerve centres are helped by their appropriate pabulum—oxygenated blood—and are overwhelmed and have their function suspended by what is naturally calculated to poison and paralyze them, impure venous blood, deficient in oxygen and loaded with carbonic acid.

THE INTESTINAL AND UTERINE MUSCLES.

In sustaining the contention that, as a rule, muscles of the involuntary class contract, not when stimulated by their appropriate nerves, but when deprived of nerve energy, I have not yet alluded to the involuntary muscular fibres of the intestines and uterus. The antagonism of nerve and muscle is not here so evident as in the cases already cited, but here the relations of nerve and muscle have not as yet been completely investigated. (*a*)

Dr. M. Foster states that section of the vagi "renders difficult the passage of food along the œsophagus," and causes "a spasmodic contraction of the cardiac orifice of the stomach; in other words, the tonic action of the sphincter is increased"; (*b*) facts which sustain what has been already stated above as to the non-paralyzation of the muscles concerned, after section of their nerves. The peristaltic movements of the intestine, he states, may occur "wholly independent of the central nervous system," and are "at bottom automatic." (*c*) We have it on the authority of the late Dr. W. B. Carpenter, F.R.S., that "the intestinal tube from the stomach to the rectum is not dependent upon the nervous centres either for its contractility or for its power of exercising it, but is enabled to propel its contents by its own inherent powers."(*d*) So also of the uterus, the contractions of which are not due to a reflex activity of the spinal cord, but to its own inherent power of contraction; parturition having taken place after destructive injury and paralysis of the cord, and even after somatic death. (*e*) In these cases, also, the nerve would seem to be useless as the ally of the muscle, but would play an important part in controlling and regulating, by antagonizing, its contractile energy.

I must notice, in this connection, an observation of Dr. M. Foster regarding the bladder. He says: "The escape of the fluid [from the bladder] is, however, prevented by the resistance offered by the elastic fibres of the urethra, which keep the urethric channel closed. Some maintain that a tonic contraction of the sphincter vesica aids in, or, indeed, is the chief cause, of this retention. The continuity of the sphincter vesica with the rest of the circular fibres of the bladder suggests that it probably is not a sphincter, but that its use lies in its contracting after the rest of the vesical fibres and thus finishing the evacuation of the bladder. On the other hand the fact that the neck of the bladder can withstand a pressure of twenty inches of water so long as the bladder is governed by an intact spinal cord, but a pressure of six inches only when the lumbar cord is destroyed or the vesical nerves are severed, affords very strong evidence in favor of the view that the obstruction at the neck of the bladder to the exit of urine depends upon some tonic contraction maintained by a reflex or automatic action of the lumbar spinal cord."(*f*) But this experiment admits of a very different inference. We have just seen, on the authority of Dr. M. Foster, that section of the chief motor nerves of the stomach

(*a*) Dr. L. Brunton. (*b*) Phys. pp. 346, 347.

(*c*) Phys. p. 348. (*d*) Hum. Phys., p. 410.
(*e*) Ib., pp. 979 and 980. (*f*) Phys, p. 448.

"increases the tonic action of the sphincter" of the stomach, as we had before seen it does of the entire contractile tissues of that viscus. We have a right to look for a similar increase of tonic contraction in the bladder, when deprived of its nervous connection with the spinal cord, or when the latter is paralyzed. Admit that here, as in the examples cited above, the spinal nerves exercise a restraint over the contractile fibres of the bladder, tending to prevent its contraction. With this restraint intact, the bladder, is able to bear a pressure of twenty inches of water before the sphincter is overcome; whereas, with nerve influence withdrawn by section or paralysis, and the muscular fibres of the bladder set free to contract (as in the case of the esophagus and stomach), the resistance at the outlet, though also relatively increased, is overcome by the superior expelling force from above with the aid of only six inches of water-pressure. The same principle applies to involuntary discharges from the rectum, which Drs. Todd and Bowman say is due not to paralysis of the sphincter, against which the feces are driven, but to the "active pressure of the parts above which are not paralyzed."(a) The "parts above" are the intestinal muscles, which in the last stages of exhausting disease (when such discharges usually occur), have attained their freedom, just as the arterial muscles do under like circumstances, owing to the general decadence of nervous energy.

VOMITING OF PREGNANCY.

With the evidence before us as to the contraction of the gastric muscle on severance of its nerves, vomiting in general may surely be regarded as due to nerve depression rather than to nervous excitation. An additional observation in proof of the same is to be found in the fact that injury of the vagus may produce constant vomiting(b), and further, that vomiting is mentioned by Dr. C. Bastian among the symptoms of hemiplegia. (c) An explanation of the vomiting of pregnancy would be found if we might assume that a monopoly of nerve energy was being expended in the uterus, owing to the extraordinary developments taking place in that organ, thus starving the gastric nerves, so to speak, which, no longer able to sustain the gastric muscle, permit the untimely and abnormal contractions of that viscus. That this occurs chiefly in the early months of pregnancy might be accounted for by the unusual demand rather suddenly made upon the nervous resources, which tend to equalize their expenditure as the months go on and the organism becomes accustomed to its new condition.

(To be Continued).

(a) Path. Anat., p. 180.
(b) Bryant's Surgery, Amer. Ed., p. 208.
(c) Brain Disease, p. 56.

CASES IN PRACTICE.

Lilly I——, æt. seven years, a pale, thin, sallow child, had for the past three years been greatly troubled with worms, often passing a large number after taking the usual vermifuges. General health had been good; active in habit and cheerful. Had been out the day before I was called in, playing in the snow in the intensely cold weather the first week in January. Came home complaining of feeling sick with pain in right iliac region. I was called in on the following day, 7th January, and found her feverish, vomiting and restless, with anxious expression and great pain on pressure over painful region. On her mother telling me that she had vomited as well as passed, per rectum, several large round worms, I prescribed santonin with calomel, and gave an alkaline fever mixture. The next day she was less feverish, had less pain, but the vomiting was incessant, with considerable prostration. I ordered bismuth and oxalate of cerium and brandy. The symptoms were worse on the 9th, the pain on pressure being greater and extending over a greater area. Repeated the santonin, and gave scale pepsine, which apparently allayed the vomiting for a while. On the 10th her sufferings were so severe that I was obliged to give opium, with the effect of easing the pain and stopping the vomiting, but the tympanites increased. In the meantime injections had been given to keep the bowels open.

On 11th, all symptoms were worse; pain incessant, tympanites great, vomiting large quantities of green liquid, She died at 10 p.m., perforation evidently having taken place. No worms had passed for several days, but the vomiting being so troublesome it was impossible for her to retain medicine or nourishment.

Assisted by Dr. Storms, I made a hasty post mortem, which was all that could be obtained

under the circumstances. On opening the abdomen, we found the bowels covered with pus, and the usual evidence of extensive inflammation. In the stomach we found two or three large lumbrici, but the duodenum and whole of the intestines down to the rectum were completely filled with large round worms. At every incision I made I could draw out masses of worms twisted together in every way. I suppose out of some eight or ten incisions I took over one hundred worms, but this did not represent a tenth part of what the intestines evidently contained. Lack of time prevented me making a thorough examination, and finding the exact number present. I have never before met such a case, and perhaps it may be of interest to some of your readers.

WM. GEDDES STARK.

Hamilton, Feb. 10th, 1888.

CASES IN PRACTICE.

The following observations may be of interest to the profession, showing as they do how an intercurrent rash may be developed during the course of an attack of chicken-pox or small-pox.

W. F. B., æt. 10 years, was attacked with varicella. Pocks full and large on Monday, 16th inst.; on Wednesday, 18th inst., scarlatinal rash appeared; and on Sunday, 22nd inst., the rash was fading rapidly. The boy now appears to be doing nicely. The scarlatinal rash was profuse. Nearly 21 years ago, during an epidemic of small-pox, I attended a young woman on whom, on or about the second week of that disease, a rash appeared in the interspaces of the pocks, which developed in the usual time, into an apparently well marked case of measles, ran the usual course and disappeared, ere the traces of the pocks had disappeared.

A. ARMSTRONG.

Arnprior, Feb., 1888,

Correspondence.

OUR LONDON LETTER.

(From Our Own Correspondent.)

LONDON, Feb. 12th, 1888.

CLINICAL NOTES.

The following case of severe endocarditis, with recovery under large doses of sodium sulpho-carbolate, may prove of interest to readers of the LANCET.

Patient, Ellen H., aged twenty, under care of Dr. Sansom, London Hospital, was poorly nourished, somewhat anemic, extremely weak and prostrate. She complained of a sensation of weight at the heart and a pain that encircled her at the level of the diaphragm. Had some family history of rheumatism, and the patient herself was said to have suffered from rheumatism, with inflammation of the lungs, twelve months previously. Present illness commenced with sore throat, followed by pain in the head and left side, and for a week before admission she coughed and spat up a little blood. Breath sounds were deficient at base of left lung, together with slight comparative dulness. The outline of the heart, as determined by percussion, seemed normal; there was a soft systolic murmur at the apex. The urine was of sp. gr. 1020, acid, contained a little mucus, but no albumen. Patient was fretful and complaining, dozing during day, and wakeful at night, asserting that she suffered pain in varying situations; frequently groaning. The temperature was 104.5° F. For seven weeks she continued in a very unsatisfactory condition. During this time the signs of auscultation of the heart varied considerably. The systolic murmur which was at first soft and slightly pronounced, became musical in quality, and was heard down the left border of the sternum, as well as in its former situation. The second sound heard over the site of the pulmonary valves, was one day slightly pronounced, on another it was accentuated, on another but feebly heard. Five weeks after admission a short diastolic murmur was heard at the left border of the sternum, at the level of the sixth rib; this became more and more marked and was heard at a higher level, showing that the endocarditis was progressing. Observation of the pulse by the finger indicated low tension, but not nearly to such degree as was revealed by the sphygmographic tracing. The general condition of the patient somewhat resembled that of typhoid; the peculiar hebetude, constipation, alternating with diarrhea, continued prostration, rapid wasting, and irregular breathing, the rate of respiration varying from twenty-eight to forty-eight.

The patient was first put upon tincture of perchloride of iron in fifteen minim doses, with twelve minims of tincture of digitalis; the throat, still sore, being gargled with a solution of chlorate of potassium. This plan of treatment, with a slight

opiate occasionally, was continued for thirteen days, then alkalies with digitalis were administered. The case showing no amendment, quinine sulphate in five-grain doses with hydrobromic acid three times a day for five days, twice a day afterwards, was prescribed, and small blisters were applied over the heart region. There being no improvement, but the reverse, the sulpho-carbolate of sodium in thirty grain doses three times a day was administered. Carbolized oil, one part of pure carbolic acid in four parts of olive oil, also was rubbed into the chest and back twice a day. At the end of five days the general condition began to improve, and two days after it was noted that the patient slept well and had a good appetite. She still made many complaints of pain, and the mental condition was unstable, but there was a progressive improvement in all the general signs, and after twenty-three days of this treatment, appetite was good, bowels regular, temperature normal and patient asserted that she felt better. She was now in a totally different mental condition, the hebetude having quite passed away. The sulpho-carbolate was now omitted and the tincture of perchloride of iron, ten minims with five minims of tincture of digitalis in infusion of quassia, ordered, and shortly afterwards the patient was discharged, active, cheerful and bright.

In cases of ozena, the following is prescribed at the hospital for diseases of the throat and nose: ℞—Sod.-bicarb., grs. xij; acid carbol., gr. iss; aq. ad. ℥j; fiat lotio. Sig.—Tablespoonful in half a teacupful of lukewarm water, to be sniffed up the nose night and morning, followed by insufflation of equal parts of iodol and bismuth carb., and pil. strych. et ferri given three times a day.

In acute tonsillitis, the following treatment proves to be most effectual. First washing out the mouth and pharynx with liq. calcis, then freely rubbing the inflamed tonsils every hour with sod. bicarb., applied with the finger; the following mixture being taken internally: ℞—Tinct. ferri. perchlor., ʒij; glycerine ad. ℥ij. Sig.—Teaspoonful every two hours.

In post nasal catarrh associated with deafness, the following is a favorite lotion: ℞—Ammon. chlorid., ℥j; sodii. chlorid., ℥ijss. Sig.—Teaspoonful in tumblerful of warm water, to be used with nasal douche twice daily.

In otorrhea: ℞—Zinci sulph., grs. v; acid carbol., grs. v; aq. ad. ℥j. Sig.—To be used with an equal quantity of warm water, a little squeezed from cotton wool into the ear five or six times daily. This may be advantageously followed by ℞—Thymol, grs. iij; spts. vin. rect., ʒvj; aq., ℥iij, fiat lotio. Sig.—To be used in the same manner. In all cases of pain in the ear, as well as ordinary earache, the following will almost invariably give relief: ℞—Plumbi acetas, grs. iij: tinct. opii, ʒij; glycerine, ʒiij; aq. ad., ℥iij. Sig.—To be warmed and a little dropped or squeezed from cotton wool into the ear.

In chronic eczema of the external meatus, the following ointment is found most beneficial: ℞—Liq. carbonis detergens ♏x; liq. calcis, ♏xx; ungt. hyd. nit. dil., grs. xx; ungt. zinci. ad., ℥j; ft. ungt. Sig.—To be applied with a brush three times daily.

In chronic non-suppurative catarrh of ear, the following inhalation is very effective: ℞—Tinct. iodi, ether acetic, āā ℥j. Sig.—Twenty drops in a pint of hot water (about 150° F.), for inhalation two or three times a day by the Valsalvan method.

Canadian.

OUR NEW YORK LETTER.

From our Own Correspondent.

New York, Feb. 18th, 1888.

Cocaine, as a local anesthetic is used of course largely by the eye, nose and throat specialists, but Dr. Wyeth, Professor of Surgery at the N. Y. Polyclinic, is very enthusiastic as to its value in minor and genito-urinary surgery, and uses it extensively in his clinics, where it certainly does give splendid satisfaction.

A doctor attending the Polyclinic, had on his left thigh, in the gluteal region, a lipoma of the size of a large goose-egg. Dr. Wyeth removed the tumor, using cocaine as an anesthetic. Along the proposed line of incision, say three inches or more, he injected a 4 per cent. solution of cocaine, introducing the needle and injecting a few minims, withdrawing it a little and injecting a few more, and so along the line. In all he injected about two grains. While dissecting out the tumor he injected in the tissues a few minims on the slightest pain being felt by the patient, so that the removal of the whole tumor caused the patient no

pain whatever. The wound was sewed up, dressed antiseptically, and the patient dressed and went about his work, feeling no discomfort from the operation. The only pain felt at all was that caused by the hypodermic puncture. Of course the whole of the cocaine was not absorbed, as the greater portion was washed away by the blood and irrigation when the incision was made. Three grains injected at once into the circulation will cause no bad symptoms, and Dr. W. A. Hammond says he injected into his own circulation at one injection 18 grains; symptoms of intoxication ensuing, but nothing alarming. Dr. Wyeth advises that when much cocaine is used, it be let into the general circulation gradually; for instance, if operating where a tourniquet is employed, to loosen the tourniquet every now and then and allow the cocaine to gradually enter the circulation, and no bad symptoms will ensue.

In performing internal urethrotomy, his mode of procedure is about as follows. The day previous to operation, he gives the patient oleum gaultheria to sterilize the urine, a property which this drug seems to possess, and by this means urethral fever is prevented. At the time of the operation the stricture is localized by means of an exploring bougie, consisting of a long flexible shaft of about $\frac{1}{10}$ inch in diameter, and having a bulbous extremity, in which the shoulders of the bulb come off at right angles to the shaft, a modification of the olive-shaped bulb. The bulbous portion is graduated in scales of $\frac{1}{50}$th of an inch. Introducing the bougie it passes readily till the stricture is reached, and passing it through the scricture, its withdrawal is attempted when a decided resistance to the shoulders of the bougie indicates the end of the stricture nearest the bladder. Then making a slight bend in the shaft at the meatus, the bougie is withdrawn, and as it leaves the stricture the sense of resistance is lost. Another bend in the shaft at the meatus is made. The length of stricture is indicated by the distance between the two "bends," and the distance the stricture is from the meatus also indicated. Then by means of a long urethral syringe a 4 per cent. solution of cocaine is injected and kept there for a few minutes. A Wyeth's modification of this urethrotome is used, and the length of the stricture and its exact location being known, the stricture is divided from behind forward.

In over a dozen cases which I have seen done in this way the patients were entirely unconscious of any pain during the operation, and some of them did not know their strictures had been divided until told so after leaving the table. Dilatation is kept up by the daily passage of sounds for some time, and patients instructed to have a sound passed at occasional intervals for a long period.

Cocaine is used in operations for fistula in ano, hemorrhoids, abscesses, felons, and all such minor operations.

Iodide of potassium is given in large doses in cases of syphilis—particularly in cerebral syphilis. Dr. W. A. Hammond, of the *Post-Graduate*, gave the following as his method of administering this drug in a case of cerebral syphilis where the pain was excessive and continuous. Commence with 25 gtt. of a saturated solution equivalent to 25 grains, t. i. d. in water, and on a full stomach. He increases the dose by three drops a day until an effect is produced, going as high as 200 gtt. t.i.d. if necessary. As the dose is increased, so increase the amount of water, using, say with 200 grains a pint and a half of water, and sipping it. If no effect is produced by a 200 grain dose, stop, as the probability is that the pot. iodid. will have no effect. If, however, 200 grains does produce some effect, go, if necessary, to as much as ℥j doses three times a day. Such large doses would be necessary only in very intractable cases. But ℥j and ℥iss doses are frequently prescribed and the patients appear to grow fat under the influence of the drug, nor are symptoms of iodism usually produced.

CANUCK.

Selected Articles.

TREATMENT OF TYPHOID FEVER IN THE PHILADELPHIA HOSPITALS.

PENNSYLVANIA HOSPITAL.

Dr. Da Costa does not accept any specific plan of treatment, although he generally administers the mineral acids; of these he most often prescribes nitromuriatic acid, twenty drops of the dilute acid every fourth hour. He does not interfere with the action of the bowels, unless the discharges exceed three, when he is most apt to order opium, in the shape of suppository.

He insists upon the patient being fed with liquid food every two honrs during the day-time,

but not quite so often at night. He generally begins with stimulants in the second week of the disease, taking as his guide the state of the first sound of the heart. Rarely, however, does he give more than from eight to ten ounces of whiskey in twenty-four hours.

The patient is sponged with cool water twice daily, oftener if the temperature exceed 103°. Under these circumstances, too, an occasional decided dose of quinine, or antipyrine is resorted to, particularly if the high temperature be in the morning or show signs of persistency. He is an advocate of being very watchful for complications, and for their early treatment. Late in the fever and during convalescence he generally directs quinine.

PHILADELPHIA HOSPITAL.

Dr. Tyson's treatment of typhoid fever is mainly a symptomatic one. Placing the patient upon a milk diet from the outset, and continuing it until convalescence is established, symptoms are treated as they arise. Diarrhea is preferably controlled by nitrate of silver and the extract of opium, one-quarter grain of each three or four times a day. In more obstinate cases of diarrhea where this treatment fails, although seldom necessary, the more powerful astringent, acetate of lead, and more rarely tannin, is substituted for the nitrate of silver. Abdominal pain and tenderness are treated with poultices in addition to opium.

High temperature (104° to 105°) is combated by sponging the body. Persistent temperature above 105° is treated by wrapping the trunk with cloths wrung out in iced water, which are renewed every hour or half hour, and even oftener if necessary, the temperature under these circumstauces being taken hourly. Quinine is given in almost every case, not as an antipyretic, but as a tonic and stimulant, in doses of from six to sixteen grains daily. The stage of dry tongue is treated with turpentine in doses of ten drops every three hours.

Alcoholic stimulants are used in almost every case as required: moderately in mild cases, and in full doses in severe cases, frequently half an ounce every two hours. Sometimes larger doses are given. *Very high temperatures are regarded as demanding the fullest stimulation.* Dr. Tyson has used largely the modern antipyretics, thallin, antipyrin, and antifebrin, but considers them inferior to the iced cloths Of these antipyretics, however, he prefers antifebrin as less alarming in its effects, and equally efficient with the others in reducing temperature.

Dr. E. T. Bruen conducts his treatment without reference to the administration of specifics. During the first few days, especially in the fall of the year, when malarial influences prevail, it is customary to give for one or two days full doses of quinine for diagnostic purposes. If the continued nature of the fever is demonstrated, an expectant plan of treatment is inaugurated, which in mild cases is continued throughout the course of the disease till its termination.

If the temeprature exceeds 104°, sponging with cool or cold water is the means usually adopted. The sponging must be repeated every few hours. Sometimes cold water in rubber bags is applied to the back of the head and abdomen. The cold bath is reserved for those exceptional cases in which the high temperature seems to be influencing the nervous centres. The cold water bath he believes can be employed in the early stages of the fever with more safety than later on, since the vasomotor centres are much more responsive. and dangerous congestions of the viscera are avoided. The administration of antipyretics, such as antipyrin or antifebrin, so useful in the zymotic fevers of childhood or in the hectic of consumption, is to be avoided in typhoid fever for fear of disturbing the activity of the stomach. When the typhoid state is marked, associated with high temperature, the occasional use of antifebrin, in five-grain doses, is desirable and preferable to the cold bath. But persistent systematic sponging of the surface of the body in the usual order is the safest and best means in his hands of reducing temperature in typhoid fever. Quinine is employed in tonic doses, but not as an antipyretic.

Great stress is laid upon the administration of nourishment. From four to six ounces of milk should be given every two hours for eighteen hours out of the twenty-four. An interval of five hours once in the twenty-four should be secured to foster the digestive powers. Care should be taken to prevent the coagulation of the casein by dilution with Apollinaris or lime water; one or two raw eggs may be administered every other day. This method of diet is relied upon till convalescence is inaugurated, when the beef broths, prepared with some cereal, are allowed. The importance of delaying the use of meats until the temperature has been quite normal for more than a week, cannot be overestimated, and the first solid diet permitted to convalescents is farinaceous in character.

When diarrhea manifests itself, nitrate of silver in $\frac{1}{6}$th grain doses with $\frac{1}{24}$th of ext. opium is given every four hours, with opium suppositories, if necessary, in addition. In the majority of cases this is sufficient; but acetate of lead is resorted to in case of failure. Turpentine in emulsion (with muriatic acid in cases in which silver is not used) is always employed as soon as the typhoid state begins. The general stimulative properties of turpentine, aside from its local effects, render it invaluable in a majority of cases. Constipation of the bowels must be avoided, and every other day at least the bowels should be moved. Enemata, carefully given, seem to him the best mode of securing the desired end.

Internal congestions are antagonized by chang-

ing the position of the patient, by turpentine stupes, and by cupping the chest when the lungs are the organs involved. A cotton jacket neatly made and applied, is very useful under these circumstances. Hemorrhages from the bowels are treated with opium and acetate of lead. In order to stimulate the circulation, whiskey is given early in the history of those cases in which high temperature marks the reception of a full supply of the typhoid poison, and the advent of the initial symptoms of the typhoid state are carefully looked for even in those patients in whom the mild character of the symptoms does not seem to call for stimulation. Those patients who have been habitual free consumers of alcohol require the largest amounts of this drug during typhoid fever. It is important, whenever practicable, to suspend the medicine, as well as the food, for one five-hour interval in the twenty-four in order to avoid overtaxing the stomach.

EPISCOPAL HOSPITAL.

Dr. Frederick P. Henry, in treating the cases in his wards, seeks to control diarrhea and allay its attendant peristalsis; to subdue nervous excitement, and to keep the temperature within moderate bounds. To accomplish these ends, the nutrition, stimulation, and medication of the patient receive the most careful attention. While the fever lasts, the diet is altogether liquid, and consists of milk with lime water, and animal broths. In giving these substances he endeavors to proportion their amount to the patient's digestive powers, for, to quote the language of Collie, without fully accepting it, "pints of milk and eggs in the stomach or bowels undigested are about as useful there as a cannon ball." When convalescence begins and farinaceous foods are first administered, a slight rise of temperature is the rule. This does not contra-indicate their continued employment, but may be regarded as physiological.

Stimulants are not given as a matter of routine, but only *pro re nata*. It is seldom that more than six ounces of whiskey are given *per diem*, and a certain number of mild cases receive no alcohol whatever. When diarrhea is obstinate, port wine is substituted for whiskey. Heroic measures have never been in vogue at this hospital, and, therefore, an attitude of "masterly inactivity" was preserved during the period of the cold bath craze. A more gradual, and, therefore, a more physiological effect, certainly one more soothing to the nervous system, is obtained by repeated sponging with tepid water. The latter method may be compared to a hint; the former to a denial, and in dealing with men's bodies as with their minds, suggestion, so to speak, is better than contradiction.

Some ten years ago, quinine was given in large amount—gr. xv to xx in the course of an hour—for its antipyretic effect, but this method was soon abandoned, and for several years the doses of this drug have not exceeded gr. xij *per diem*. To this extent it has been, until quite recently, administered as a matter of routine. Antipyrin and antifebrin have been thoroughly tested, and the opinion with reference to them is that they should be used with caution and reserved for emergencies of hyperpyrexia. The rapid descent of temperature produced by these remarkable agents has been, in rare instances, attended with a somewhat alarming condition of collapse. Fifteen grains of antipyrin given in three doses in the course of a half hour are, as a rule, sufficient to produce a decided effect, and Dr. Henry possesses a temperature chart, which shows that, on several occasions, five grains of antifebrin have caused a defervescence of from 4.5° to 5° F. In another chart a fall of nearly 6° (from 103.6° to 98°) was affected by the same dose. A decided impression upon the temperature has often been made by doses of 2.5 grains.

The benefits to be derived from turpentine are problematical, which is not to be wondered at, when it is recalled that the gastric mucosa is always in a hyperemic or catarrhal condition, and has been more than once observed to be the seat of the specific typhoid deposit and ulceration. Accordingly this drug is but little used. Opium suppositories are mainly relied on to check excessive diarrhea and allay peristalsis, and, when they prove insufficient, astringents, such as acetate of lead and gallic acid, are given *per os*; a moderate diarrhea is never interfered with. By moderate, as here employed, is understood from three to six gruel or mush-like evacuations in the twenty-four hours. The same drugs that are used to control diarrhea are, with the addition of ergot administered in case of intestinal hemorrhage. When tympany is great, powdered charcoal and enemata of tepid water have been found of decided benefit.

The treatment outlined above may be described as symptomatic and expectant. It is, in no sense of the word, specific. The latter adjective may be applied, with propriety, to measures which have as their object, the shortening of the course of the disease, or the mitigation of its severity, and which are addressed to the specific intestinal lesions. Such measures have not been neglected in the Episcopal Hospital. Nitrate of silver, carbolic acid and iodine, and Labarraque's solution have been systematically tested, but Dr. Henry believes them to be, one and all, inferior to thymol. He has given his experience with this drug in a recent contribution to the *Medical News* (Sept. 3, 1887), to which the reader is referred, and, since that time, he has received confirmation of his statements from several sources. "The favorable effect of the drug was evinced by a steady descent of the temperature, by a gradual diminution in the daily number of stools, by the absence of mental excitement, and, most conspicuously, by

the clean, moist tongue presented in every instance. . . . . I have always prescribed the thymol in pill, of which the best excipient is medicinal soap, and, so far, have not given more than thirty grains in twenty-four hours, two 2½ grain pills every four hours. This is a small dose, but I have seen no reason to increase it. This may be done, however, with perfect safety, and, perhaps, with still better results."

Quite as good results have been claimed for naphthalin, but, so far as he knows, it has not been used in the Episcopal Hospital, and, other things being equal, the comparative innocuousness of thymol should entitle it to the preference.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

Dr. Pepper holds that there is no disease more influenced than this in its later course and result by the management of its initial period. Whenever there is the least suspicion that typhoid fever is beginning the patient should have the benefit of the doubt, and from that moment should be treated with strict thoroughness. Sometimes this will induce abortion of the case, for it is one of the diseases which is, so to speak, self-perpetuating, owing to the continual development of the materies morbi in the intestinal canal so long as the contents afford a suitable culture medium.

This condition is much affected by the diet, and by agents which influence the lesions of the intestinal glands. It is well to repeat that from the earliest moment we must insist on absolute rest. Much harm is done by postponing for two or three days the necessary confinement to bed. So should an absolute restriction of diet be imposed at once. It seems to Dr. Pepper that the intestinal canal is kept in the best condition when from the earliest hour the diet has consisted exclusively of milk, light gruels or broths, and pure water. Milk may seem to disagree, but it will then usually be found that it has been given in too large amounts or at too short intervals or that to enable it to be digested it must be diluted or peptonized. For patients with typhoid fever must be fed, not on theory, but according to the observed effects of the food given. Tympany and diarrhea are often the result of excessive or improper feeding, although more commonly they may be caused by the enfeebled state of the muscles of the intestinal and abdominal walls, and by the lesions of the mucous membrane. Under the influence of the unqualified dictum that fevers should be fed, a dictum much more universally applicable to typhus than to typhoid fever, many cases of the latter are injured by injudicious feeding. Not only may tympany and diarrhea be promoted thereby, but the accumulation of imperfectly digested organic matter in the bowels may favor the multiplication of the specific materies morbi, and also the development of ptomaines. This question of feeding is, therefore, the fundamental one in typhoid fever, and should be treated with caution and minute attention in each case.

Next in importance seems the administration of some remedy directed to the invariably present lesion of the intestinal glands. Drugs which exert a sedative astringent effect, which do not hurt the stomach, and which are antiseptic either directly or by their action on albuminoids, would seem to be indicated ; and Dr. Pepper thinks that some such remedy should form a part of our treatment of every case of typhoid fever, from the earliest hour when we suspect the nature of the case. Creasote, carbolic acid, iodoform, mineral acids, especially muriatic and sulphurous, and nitrate of silver, suggest themselves. In the great majority of cases he much prefers nitrate of silver, and since he revived the use of the remedy in typhoid fever it has been employed so extensively and with such admirable results as to have established its value. It is given from the outset in doses of gr. ⅛ to gr. ¼ thrice daily, combined with small amounts of opium, or belladonna, or nux vomica, according to special indications. He has come to believe that the appearance of dangerous symptoms is rendered less frequent, and the entire course of the disease rendered more favorable by the early use of this remedy in conjunction with an early insistance on absolute rest and carefully adjusted feeding.

When the typhoid symptoms become pronounced, especially the dry, brown, tremulous tongue with weak heart, and paretic tympany, he substitutes, or adds, turpentine. When the tongue remains moist but is flabby and white coated, the bowels torpid, and the secretions scanty, the mineral acids with strychnia in solution seem indicated.

Space forbids mention of the obvious indications in certain cases for other remedies of this group. Alcohol is required sooner or later in most cases of typhoid fever, yet he never prescribes it except when definite indications call for it. These indications are sought in the character of the cardiac action, of the nervous symptoms, of the digestion, and of the pyrexia. By withholding it until called for, and then giving it in small doses, and by cautiously increasing the dose and strength of the preparation used, we secure all possible benefit, and avoid the harm which follows here, as elsewhere, its excessive or untimely use.

Nearly always also there arises in the course of typhoid fever the necessity of controlling the pyrexia. But this necessity will be less frequent in proportion as the elements of treatment already insisted on are early and thoroughly attended to. So long as the temperature remains reasonably low, 102½° to 103°, and no nervous or cardiac symptoms appear attributable to the mere pyrexia, we need pay no special attention to it. But at any time, even during the earliest days, the fever may reach a point requiring interference. If

quinine has been given in moderate doses, as is often the case, one or two full doses are now used, but recent experience had led to a preference for antipyrin when only an occasional antipyretic effect is required, or to the external use of cold water by sponging or affusion when the tendency to hyperpyrexia shows more obstinacy.

Dr. Osler believes a plan of armed expectancy to be, in the present state of our knowledge, the most rational. The majority of the cases require little or no medicinal treatment. The routine of a restricted diet under the watchful care of an intelligent nurse, meets the *indicatio morbi*. No initial purge is given, as the cases are never brought to hospital very early, and constipation is not dreaded. An acid mixture is sometimes ordered, or dilute hydrochloric acid is added to the water, which is given freely. As it is possible that the defective elimination of the products of regressive tissues changes may be, in part at least, the cause of the so-called typhoid symptoms, every effort is made to keep active the skin and kidneys. Repeated spongings and an abundance of fresh cool water to drink, answer the purpose.

A milk diet is ordered—about three pints in the twenty-four hours. Very exceptionally it has to be artificially prepared. An examination of the stools will often indicate if too much milk is taken, or if it is not digested. Warm milk is less apt to produce flatulence. Broths and beaten-up eggs are allowed in mild cases.

When the fever reaches 103°-104°, the spongings are more frequently used. If it rises higher —104°-105°—the wet pack is ordered, or a dose of antipyrin or antifebrin, either of which acts promptly. The cold-water treatment is specially indicated in those cases with profoundly ataxic symptoms, though all the features in this state are not due to the pyrexia. For diarrhea, when excessive, aromatic sulphuric acid, bismuth, or naphthalin is ordered. For tympanites, turpentine stupes, turpentine internally, creasote, or naphthalin. Constipation is disregarded unless it persists longer than seven or eight days, when a saline purge or an enema is ordered. The severe headache of the early stage may demand leeches. Bromide or chloral will usually overcome the troublesome insomnia of certain cases.

When there are indications of heart failure, alcohol is given, and, if necessary, in large doses. Camphor, strychnine, and ergot supplement, but cannot replace, alcohol in this condition. Should hemorrhage occur, opium is given and an ice-bag placed on the abdomen.

A return to ordinary diet is permitted ten or twelve days after convalescence is established.

JEFFERSON MEDICAL COLLEGE HOSPITAL.

Dr. J. C. Wilson treats his cases of enteric fever by the systematic use of laxative doses of calomel during the first ten days, and by carbolized iodine, as originally suggested by Professor Bartholow, throughout the course of the disease. The most careful attention is given to the details of nursing, dietetics, and hygiene, and symptoms are treated as they become prominent. Due regard being had to the peculiarities of individual cases, the general plan is as follows:

Upon the evening of admission the patient receives seven and a half to ten grains of calomel in combination with ten grains of sodium bicarbonate, at a single dose. If the case be still in the first week, which is not usual with hospital patients, this dose is repeated every second night until its third administration; if already in the second week, a single dose only is given. After the tenth day it is given cautiously or omitted altogether. If there be constipation, the first dose of calomel is followed by two or three large stools mostly of the consistency of mush, the later doses by stools decidedly liquid. Diarrhea is not regarded as a contra-indication. On the contrary, it almost always becomes less troublesome after the action of the mercurial. During the subsequent course of the disease, constipation is not allowed to continue at any time beyond the third day; but is relieved as a rule by an eight ounce enema of warm, thin gruel, slowly injected, or exceptionally by a five, or seven and a half grain dose of calomel; the choice being influenced by the character and prominence of abdominal symptoms. Under this plan of treatment diarrhea is not commonly excessive. When necessary, it is treated by one grain suppositories of the aqueous extract of opium.

From the beginning the patient receives at intervals of two hours during the day, and three hours during the night, and immediately after the administration of nourishment, two or three drops of a mixture of two parts tincture of iodine and one part pure liquid carbolic acid. This dose is administered in an ounce of iced water. Unless the temperature exceeds 104° F., the fever calls for no special treatment, beyond cold sponging, which is practised in every case at least twice in the twenty-four hours. A higher temperature receives prompt attention. After trial of the list of new antipyretics, the choice is antipyrin. It is used in single doses of ten to fifteen grains, and repeated when the temperature again rises beyond 104° F. If this remedy fails of its effect, large compresses of several thicknesses extending across the chest and abdomen from the neck to the pubes, and freely wet with iced water, are used. The gradually cooled bath is held in reserve.

Alcohol has no necessary part in the routine treatment of enteric fever. Many cases do not require it; some are unquestionably benefitted by it; while to a considerable proportion it is an absolute necessity. Dr. Wilson believes that the

employment of alcohol in the treatment of fevers should be regarded not as a dietetic but invariably as a medicinal measure.

Space does not permit the discussion of the treatment of complications, nor of the management of convalescence. If perforation occurs during or after the period of defervescence, namely, in the fourth week or later, laparotomy should be performed.—*Med. News.*

SOME LABORATORY NOTES ON PAPOID DIGESTION.

For some time it has been known that the stems, leaves and unripe fruit of a plant called *Carica papaya* contain a ferment capable of digesting proteids. This plant is found in the East and West Indies and in South America. The natives of many localities where this plant is indigenous make a practice of rolling their fresh meat in caraca leaves to make it tender and easier of digestion. From the juice of this plant Dr. Finkler, of Bonn University, has made an albuminous preparation containing the ferment, which is now attracting much attention under the name of Papoid.

Wurtz, however, was the first to isolate the ferment, to which he gave the name of *papain*, and ascribed to it certain definite and characteristic reactions. About 90 per cent. of commercial papoid is soluble in water; the residue consists chiefly of coagulated albumen. The solution contains globulin, but it is highly probable that the ferment is quite independent of this albuminoid, as the globulin may be precipitated, leaving in the solutian a large part, if not all, of the ferment. As papoid contains the ferment papain and also some albumen on which it may act, care must be taken to keep it dry. The unsatisfactory results obtained by some in its use are no doubt due to previous exposure of the sample to moisture. A solution of papoid will always give the peptone reaction on standing a few hours.

The greatest differences of opinion have been expressed by different experimenters as to the conditions most favorable to the activity of papoid. Albrecht (*Schmidt's Jhrbuch*, Bd. 190) states that papain digestion is hastened by the presence of hydrochloric acid. Wurtz, on the other hand shows that papain digestion is essentially a neutral one, which is most rapid and thorough at a temperature of about 40°. Rossbach has recorded a few experiments—at variance with most others—in which he claims that this ferment is not more active in a warm solution than in a cold one. As papain is a vegetable product, this seems highly probable, but the careful experiments of Dr. Sidney Martin fully prove that a moderate degree of heat increases the activity of this ferment just as it does that of any other. The fact remains, however, that papain has powerful digesting action at at ordinary temperatures—50°–70°F. Dr. Martin has published, at some length, a series of carefully made experiments on the nature and action of papain in the *Journal of Physiology*, Vols. V. and VI, and the results of the following experiments, where they run parallel with his, closely correspond with the results obtained by this author.

In each of the following experiments the digestion mixture consisted of 1 gramme of pure dry fibrin in powder, which was boiled in 20 cc. of water and allowed to stand for 12 hours to soften. To this was added 10 cc. of a 1 per cent. solution of the ferment to be used, and standard acid or alkali to required strength, making the whole mixture up to 50 cc. The digestions were carried on in an incubator kept at a constant temperature of 37-38°C., and at the end of a variable time the undissolved fibrin was filtered off on a small, tared filter, and after thorough washing was dried at 100° to constant weight. Thus the undigested fibrin could be weighed in the same condition as before it was submitted to the action of the ferment, and any experimental error caused by the presence of a variable quantity of moisture was eliminated. It is not easy to understand how relative digestion can be accurately determined by those who experiment with proteids of such indefinite and variable composition as "hard-boiled egg," "fresh meat," and "freshly coagulated albumen"; yet many of the published results on papoid digestion have been based on experiments in which their substances were weighed before and after the action of the ferment.

EXPERIMENT I.—Digestion mixture consisted of 1 gramme fibrin, 10 cc. of a 1 per cent. solution of papoid or pepsin in a neutral medium; time 20 hours; temperature 37-38°C. Experiment done in duplicate:

	Undigested fibrin.	*Per cent. digested.*
Papoid (*a*)	.187 grm.	81.3 per cent.
Papoid (*b*)	.13 "	87.0 "
Pepsin (*a*)	.903 "	9.7 "
Pepsin (*b*)	.883 "	11.7 "

EXPERIMENT II.—Conditions the same as in I, but in an acid medium of .3 per cent. hydrochloric acid; time 20 hours; temperature 37-38°C.:

	Undigested fibrin.	*Per cent. digested.*
Papoid (*a*)	.972 grm.	2.8 per cent.
Papoid (*b*)	.923 "	7.7 "
Pepsin (*a*)	.08 "	92.0 "
Pepsin (*b*)	.04 "	96.0 "

EXPERIMENT III.—Pepsin in .3 per cent. hydrochloric acid and papoid in a neutral medium; other conditions as before; time 15 hours:

	Undigested fibrin.	*Per cent. digested.*
Papoid (*a*)	.378 grm.	62.2 per cent.
Papoid (*b*)	.322 "	67.8 "
Pepsin (*a*)	.232 "	76.8 "
Pepsin (*b*)	.281 "	71.9 "

EXPERIMENT IV.—Papoid and pancreatin in 1 per

cent. solution of sodium carbonate; other conditions as before; time 18 hours:

	Undigested fibrin.	*Per cent. digested.*
Papoi l	.37 grm	63 per cent
Pancreatin	.02 "	98 "

EXPERIMENT V.—Papoid in .2 per cent. solution of sodium carbonate and pancreatin in a 1 per cent. solution; other conditions as in Experiment I; time 20 hours:

	Undigested fibrin.	*Per cent. digested.*
Papoid	.131 grm.	86.9 per cent.
Pancreatine	.122 "	87.8 "

EXPERIMENT VI.—In order to determine the conditions under which papoid is most active, its action on 1 grm. of fibrin in the presence of different quantities of alkali was estimated with the following result; time 18 hours:

	Undigested fibrin.	*Per cent. digested.*
Papoid + 1 per ct. Na_2CO_3	.44 grm.	56 per cent.
+ 5 "	.28 "	72 "
+ 2 "	.12 "	88 "
in neutral solution	.18 "	82 "
In 3 p.c. hydrochloric acid	96 "	4 "

EXPERIMENT VII.—The action of papoid in neutral solution on diptheritic membrane compared with that of pepsin:

(*a*) Papoid digested completely .3 grm. of diphtheritic membrane in 20 hours.

Pepsin had only partially dissolved the same weight of membrane at the end of 36 hours.

(*b*) Papoid dissolved completely 5 grm. of membrane in 23-24 hours.

In these experiments a 5 per cent. solution of papoid or of pepsin was added to the undivided membrane, and the whole kept wet during the time specified. The membrane was reduced to a clear fluid jelly by papoid, but only partially attacked by the pepsin under the same conditions.

EXPERIMENT VIII.—Does acid destroy the proteolytic action of papoid as it does that of trypsin?

To ascertain this, .2 grm. of papoid was added to 1 gramme of fibrin in a .3 per cent. solution of hydrochloric acid in duplicate. Both mixtures were made up to 50 cc. and left in the incubator for three hours. At that time one mixture was estimated and the other made faintly alkaline with sodium carbonate and left in the incubator for 13 hours longer. The acid mixture showed no digestion,—no reaction indicating peptones could be obtained. At the end of 13 hours the other mixture gave a residue of .23 grm., showing that 77 per cent. had been digested. The proteolytic ferment of papoid is therefore not destroyed by being kept in an acid medium for three hours at blood heat; its action is only suspended. The conclusions to be drawn from these experiments are obvious. Papoid evidently contains a powerful preteolytic ferment which resembles trypsin both in the conditions under which it is most active and and in its mode of digestion. It corrodes the fibrin, dissolving each piece away from the surface to the centre, does not gelatinize the whole mass like pepsin. Moreover, one can readily obtain leucin in the products of digestion. Tyrpsin could not be obtained by the writer, but its presence was determined by Dr. Martin, who worked with larger digestion mixtures. Papoid, as shown in Experiment II, is quite inactive in small quantities in an acid medium of .3 per cent. hydrochloric acid. A certain amount—3 to 7 per cent. of the fibrin—was dissolved by it, but no true digestion occurred, as peptones in any quantity were absent. The results of Experiment VIII, however, show that although it is inactive in acid its functions are only suspended, the ferment is not killed. This is interesting, in view of the frequent use of papoid for treatment of dyspepsia. If the stomach be normally acid, its activity will probably be suspended entirely; if, however, the acidity be very slight, papoid will probably act. Its greatest action, however, takes place in the small intestines, where the medium is alkaline or neutral. The ferment is most energetic in a faintly alkaline medium, about .2 per cent. of sodium carbonate.

Comparing its digestive power with that of pepsin and pancreatin, Experiment I shows that in a neutral medium its activity is far greater than pepsin, but it is inferior to it in an acid medium. Under the conditions that have been found to be most favorable to their respective functional activity, papoid is but little, if at all, inferior to either pepsin or pancreatin.

Papoid is especially useful for the removal of diphtheritic membrane. The conditions present in the pharynx are just those which retard the action of pepsin and pancreatin, but do not influence papoid. The medium in which it is required to act is practically a neutral one and the temperature low, there is present, besides, a large excess of the products of digestion which does not affect papoid—indeed it is most energetic in a concentrated medium. Moreover, papoid has been shown clinically to lessen very greatly the disagreeable fetor of the disease. Painting on a 5 per cent. solution, freshly made, every two or three hours has been found to give the best results; the fetor disappears in a few hours and the membrane in from 12-18 hours becomes thin and glairy. It would seem to be especially indicated in those forms of dyspepsia in which peptic digestion is greatly impaired and where the secretion of gastric juice is very weak. Papoid, therefore, promises to be a powerful auxiliary in combating those great diseases—diphtheria and dyspepsia.—R. F. Ruttan, M.D., in *Can. Med. and Surg. Jour.*

DR. LAUDER BRUNTON finds that small doses of strychnia are very useful in neurasthenic insomnia.

MEDICAL NOTES.

Dr. Parvin considers iodine one of the best *uterine hemostatics* and antiseptics.

Professor Parvin uses this efficient formula for *carcinoma* :—

R.—Iodinii, ... ʒj.
Brominii, ... ʒij.
Acid. carbolic, ... ʒiv.
Alcohol, ... fʒviij. M.
Sig.—Apply, and then introduce a saturated solution of bicarbonate of sodium.

At a recent clinic, Prof. Holland recommended the following as an efficient *depilatory stick* :—

R.—Ceræ flavæ, ... ʒij.
Shellac, ... ℥ss.
Resin, ... ʒiv.
Picis Burgund., ... ʒx.
Gum damar., ... ʒiss. M.
Heat ; before cold, roll into sticks.

Statistics show that 30 per cent. of cases of *wounds of the abdomen* recover under antiseptic treatment when the cavity is opened for diagnostic purposes and treatment. The mortality of maternity wards in hospitals has been reduced from 15 per cent. to ½ per cent. under antiseptic precautions.

The following used through the nostrils has a high repute for *asthma* :—

R.—Menthol, ... ʒj.
Cerat., ... ʒij.
Ol. amyg. dulc., ... ʒj.
Zinci oxidi, ... ʒj.
Acidi carbolici, ... ʒss. M.
Sig.—Apply every few hours.

Dr. Horwitz, chief assistant to the surgical department of Jefferson Hospital, frequently uses the following as a favorite prescription for *injection in gonorrhea* :—

R.—Plumbi acetatis, ... ℥ss.
Zinci sulphat, ... gr. xvj.
Extract. krameriæ fluid., . . . fʒij.
Tinct. opii, ... fʒss.
Aquæ, q. s. ad., ... fʒvj. M.
Sig.—Give as injection.

The source of *albumen in the urine* of some pregnant women, says Professor Parvin, is probably a discharge, as leucorrhea or cystitis, being washed out of the vagina when urinating ; therefore, it is much better to use a catheter, or have the vagina thoroughly washed out before collecting the urine.

Professor Bartholow considers the most effective treatment for *chronic neuritis* is galvanism and morphine hypodermatically. Place the positive pole to the affected part and negative to the periphery. Repeat this treatment daily for a few minutes at a time. For very obstinate cases, use flying blisters locally, and internally iodides of potassium and colchicum.

The great secret of applying *plaster-of-Paris bandages* is to have all the sizing out of the material used, so when a piece of muslin to be used is thrown upon water it sinks readily ; if it does this it will readily absorb water and plaster and will set quickly ; a little salt added to the water is an advantage ; a roller made of lint is better than cotton to be applied next to the part. (Dr. Allis.)

Prof Parvin says the term *placental souffle* is still used improperly by many physicians instead of uterine souffle, the correct desigation ; that the placenta is not concerned in the sound is proved by the fact that the souffle is heard some days after confinement, and has been heard in uterine fibroids. The sound is synchronous with the pulse of the mother, and of very little value as a sign of pregnancy.

Professor Parvin advises that *prolapse of the vagina* be treated by astringent injections, having the bladder frequently emptied, especially if a cystocele is associated with the prolapse, which is frequently the case, and apply a suitable elastic ring pessary ; if the pessary is uncomfortable or cannot be worn, a large tampon of absorbent wool, dipped in a solution of tannin and glycerin, introduced in the morning and removed at night, may suffice.

For a case of *simple goitre* of six months' standing, Prof. Da Costa prescribed liq. iodinii comp., gtt. iij, three times a day, gradually increased to ten or fifteen drops three times a day. Locally :

R.—Iodinii, ... ℥ss.
Lanoline, ... ʒvj.
Ung. zinc. oxid., ... ʒij.
Ol. bergamot, ... gtt.v. M.
Sig.—Rub over gland twice a day.

In exophthalmic goitre a murmur is heard over thyroid gland ; in simple goitre murmur is absent.

Dr. Allis has devised a very ingenious drainage tube for *draining the thoracic cavity*. It is made by taking a piece of ordinary rubber tubing of proper size, quartering lengthwise about one inch, passing the divided portion through a piece of adhesive plaster previously perforated the size of tubing, and turning the cut euds down and securing them by another similar piece of plaster, the two adhesive surfaces approximating. When the tubing is inserted it is even with the surface of the body and kept there by the plaster, not inconveniencing the patient in any degree, who can move without danger of displacement. This simple contrivance is easily made, and has been used with satisfaction in the wards of Jefferson College Hospital.—*Col. and Clin. Rec.*

ACTION OF ANTIPYRINE.

TINEA DECALVANS A NERVOUS DISEASE.

At the meeting of the Academy of Medicine, last week, Dr. A. Robin, the newly elected member, read a paper on the action of antipyrine on nutrition. The paper contained a continuation of the researches he had undertaken in 1885 and in 1886. The deductions from these researches may be summarized as follows: 1. Antipyrine first acts on the nervous system, the excitability of which it moderates, not in a purely dynamical manner, but in acting on its elementary nutrition. 2. It diminishes the organic disintegration, and still more lowers the organic oxidations, whence the production of an excess relative to the lithic acid and of the nitrogeneous extractive materials, which are less soluble, and consequently with more difficulty eliminated than urea. It is probable that this influence on the general nutrition is the immediate consequence of the effects of antipyrine on the nervous system, as almost all depressing medicaments of the nervous activity act in nearly the same manner. 3. Antipyrine possesses also an antiseptic property very marked, even at a feeble dose, and which appears to be as manifest in the organism, and without any injury to it, as in the experiments of the laboratory. The author further observes that these three propositions indicate what should be the applications of antipyrine. It acts against pain, against painful cardiopathies and agina pectoris. As regards its administration in the treatment of fevers, Dr. Robin considers it very much compromised, as its beneficial action in these cases is very doubtful. Thus, for instance, while endeavoring to diminish disintegration, we must do everything to favor the oxidation of the disintegrated products, because the oxidations give birth to soluble residues. As antipyrine does not fulfil this indication, it should not be employed in this or any other fever. From these considerations, and from its special action on the element pain, Dr. Robin suggests that the substance now known by the name of antipyrine would be more correctly termed "analgesine," or "neurasthenine." Professor Verneuil observed that he had been rather successful in the treatment of surgical septicemic fevers by antipyrine, which Dr. Robin, however, considers a corroboration of his conclusions respecting the therapeutic properties of this drug.

At the same meeting of the Academy, Dr. Ollivier read a paper in which he endeavored to prove that "pelade," or tinea decalvans, was a non-contagious and non-parasitic malady, and that its origin was purely nervous. He therefore considered it inexpedient, and even cruel, to prevent pupils affected with the malady from attending their schools, and sometimes for a lengthened periods, much to the detriment of their studies, and perhaps of their future career, particularly as even dermatologists are divided among themselves as to whether the matter is contagious or not. Professor Hardy, the well known dermatologist, took up the subject, and stated that although he never discovered a parasitic peculiar to the malady in question, yet from his vast experience he had every reason to believe that it was contagious, and this hypothesis was confirmed by the fact that since measures have been taken to exclude children so affected from schools the cases have become much less frequent in them. Dr. Cornil, the distinguished histologist, does not believe in the contagiousness of tinea decalvans in the majority of cases, for no one as yet has discovered either a mushroom or a micro organism which may be looked upon as the peculiar agent of the disease. To this Dr. Hardy retorted that it does not follow that because no micro-organism was discovered in tinea decalvans it can be affirmed that this affection was not contagious, for although the microbe of measles and of scarlatina has not been seen, no one will contest the contagious nature of these maladies.—*Paris correspondent Med. Rec.*

QUACK ADVERTISEMENTS IN RELIGIOUS NEWSPAPERS.—From time to time medical men and medical journals have protested against the prostitution of the columns of religious newspapers to the use of advertisers of quack nostrums. This protest does not apply to temperately worded representations of what seems to have been accomplished by, or what may reasonably be expected of, a remedy or device for the cure of disease or injury. But it does apply to advertisements couched in language which bears the stamp of falsehood on its face, or which is of such a character as to arouse suspicion in the mind of an intelligent man, uninfluenced by a money consideration.

The editors of most religious journals are, as a rule, men of such intelligence that they will hardly attribute to trade-jealousy alone the objection which medical men have to the recommendation of "sure cures" for baldness, fits, rupture, consumption, and so on, to persons who are apt to regard their religious teachers as safe guides in matters of health and disease; and who are not sufficiently familiar with the subtleties of the newspapers business to distinguish between the responsibilities of the editor and those of the publisher. As a fact most readers of periodicals have the impression that the advertisements they contain are endorsed by the editor. Advertisers rely upon this fact; and we cannot understand the casuistry which satisfies the conscience of a man who edits a periodical, ostensibly devoted to religion, which replenishes its coffers with the price of palpable falsehoods.

If it were true that a religious paper could not

be financially successful without taking money for the advertisement of worthless or delusive remedies, a course might be suggested worthy of the main object of these papers. But it is not true; for there are a few happy illustrations of the fact that, even in a religious newspaper, "honesty is the best bolicy."

We call the attention of our large circle of readers to this matter, in the hope that they will use their influence to put an end to what we regard as a serious blemish in religious newspapers, and one which injures the good reputation which they ought to enjoy. And we call the attention of those religious newspapers to which our remarks may apply to this matter, in the hope that we shall not have to recur to it in a more explicit manner. —*Med. and Surg. Reporter.*

REVELATIONS OF PREHISTORIC TARTAR.—Some curious evidences of the diet of our prehistoric ancestors of the "stone age" were recently brought before the Odontological Society of Great Britain by Mr. Charles White. Whilst examining some dolicho-cephalic skulls found in a "long" barrow near Heytesbury, in Wiltshire, Mr. White was struck with the thought that as particles of food become imprisoned in the dental tartar, sealed up in a calcareous cement, and can be made to reveal themselves on solution of this material, it would be an interesting revelation if the tartar found on these teeth of the stone age could be made to give up its secrets in a similar manner. He accordingly carefully decalcified some small portions with dilute hydrochloric acid and examined the sediment under the microscope. The sediment consisted of small, drab-colored masses, apparently composed chiefly of altered and disintegrated epithelias scales mixed with the contents of starch cells. Throughout these masses were scattered grains of sand in great abundance; polarized light showed these to be of two kinds, some being composed of silex and others of quartz or granite. Their presence was to be accounted for by the method of grinding corn between two gritty stones practised in those times, and the grinding surfaces of the teeth were worn down in the most extraordinary manner from the same cause. Besides these, scattered through the sediment, Mr. White was able to identify portions of husks of corn, hairs from the outside of the husks, spiral vessels from vegetables, husks of starch, the point of a fish's tooth, a conglomeration of oval cells, probably of fruit, barblets of feathers, portions of wool, and some fragments of cartilage, together with some other organic remains which he failed to recognize. "Long" barrows are considered by archeologists to be older than the round barrows, and it is thought probable that they contain the relics of the earliest inhabitants of Britain of whom any sepulchral monuments exist. This opinion is based upon the fact that no weapons or instruments of metal of any kind have ever been found in them, though weapons of bone and stone are occassionally met with. The pottery, also, found in them is of the rudest kind, and quite devoid of ornament. The fact that vegetable tissue should be found in such a state as to be easily recognizable after the lapse of probably not less than three thousand years, is certainly remarkable; whilst the presence of fragments of wool and feathers would seem to indicate that these people were accustomed to eat their food in an uncooked condition.—*Brit. Med. Jour.*

SALT IN MILK FOR CHILDREN.—Dr. Jacobi says that the physiological effect of chloride of sodium is very important, no matter whether it is directly introduced through the mother's milk, or added as a condiment to cow's milk, or vegetable diet. Both of the latter contain more potassium than sodium, and neither ought ever to be given to the well or sick, without the addition of table salt. A portion of that which is introduced may be absorbed in solution; another part is, however, broken up into another sodium salt and hydrochloric acid. Thus it serves directly as an excitant to the secretion of the glands and facilitates digestion. Therefore during diseases in which the secretion of gastric juice is interfered with, or in the beginning of convalescence, when both the secreting faculties and the muscular power of the stomach wanting, and the necessity of resorting to nitrogenous food is apparent, an ample supply of salt ought to be furnished. The excess of acid which may get into the intestinal canal unites with the sodium of the bile in the duodenum, and assists in producing a second combination of chloride of sodium, which again is dissolved in the intestines and absorbed. Its action in the circulation is well understood; it enhances the vital processes, mainly by accelerating tissue-changes through the elimination of more urea and carbonic acid.

A very important fact is also this; that the addition of chloride of sodium prevents the solid coagulation of milk by either rennet or gastric-juice. The cow's milk ought never to be given without table salt, and the latter ought to be added to women's milk when it behaves like cow's milk in regard to solid curdling and consequent indigestibility.

Habitual constipation of children is also influenced beneficially, for two reasons: not only is the food made more digestible, but the secretions of the alimentary canal, both serous and glandular, are made more effective by its presence.—*Archives of Pediatrics.*

THE ETIOLOGY OF TYPHOID FEVER.—Dr. Quine's views on typhoid fever are summarized by the

Philadelphia Medical Times as follows: 1. The exciting cause is a specific, poisonous, microscopical germ; and under no circumstances can typhoid fever originate from the influence of filth alone, unless that filth contains the specific germ. 2. The germ is practically immortal. Typhoid dejecta may be imprisoned in an old cesspool or unused sewer-pipe for half a century, and then, after a lapse of this period, when this cesspool or unused sewer-pipe is opened, the typhoid germ literally springs into existence with frightful malignancy, and a few whiffs from the accumulations in the cesspool will be sufficient to cause it. The germ does not die spontaneously; it can be killed. 3. The germ multiplies in the human body, and an inconceivably minute quantity of this germ introduced into the human system makes the individual susceptible to the disease. An individual having a dozen movements of the bowels a day, each dejection contains germs enough to impart it to a hundred or thousand individuals; so there is clear proof that the germ multiplies in the human body. 4. The specific germ of typhoid fever is eliminated by the bowels. A person may inhale the breath of a typhoid patient without danger of contracting the malady. He may lie on the same bed throughout the entire course of the disease without danger to himself, unless in some way the intestinal dejections or emanations have found their way into his own circulation. The poison is not contained in the urine, nor in the emanations from the surface of the body, but simply in the fæcal discharges. 5. The fresh germ itself is innocuous—non-poisonous. Some investigators in Germany have engaged in the unpleasantry of drinking down fresh typhoid discharges, and have demonstrated with absolute certainty that these fresh discharges are innocuous. 6. In order for the discharges to acquire activity or virulency, they must be exposed to atmospheric air; hence old typhoid putrid discharges undergo partial decomposition. 7. The poison of typhoid fever is almost invariably swallowed in drinking from impregnated water-supplies. It is sometimes swallowed in the food. In rare, exceptional cases, typhoid germs may be diffused through the atmosphere, and find their way into the human body through the lungs. 8. A patient may have the disease two or three times; one attack does not protect him from subsequent attacks.—*Med. Rec.*

Shall the Language of Prescriptions be Simplified?—There is among medical practitioners an increasing disposition to substitute for the series of classical terms hitherto used in prescribing their simpler and more accurate equivalents in the vernacular. The reform is one which has our approval. In making this admission, however, it is necessary to define with some preciseness the extent of its application. For the purpose of present argument, a prescription may be conveniently regarded as consisting of a professional and a popular part, the former being concerned with a statement of drugs and their quantities, the latter with directions for their use. The first great requisite that should belong to such directions is, we take it, clearness. Their meaning must be plain beyond all chance of misunderstanding on the part of inexperienced dispensers, a result hardly to be expected if words, phrases, and abbreviations are clothed in a garb of studiously quaint antiquity. The advantage conferred by a common scientific language is in this connection, as a rule, wholly inoperative, since a translation of injunctions to the patient is not usually required, and, should it be needed in consequence of a change in the medical attendance, is not difficult to obtain. Doctor, chemist, nurse, and patient are here on common ground that has less to do with medicine than with attendance on the sick, and their simplest and surest means of communication is the native tongue. It is otherwise when we come to component parts and quantities of a prescribed mixture. These are the special concern of practitioners, and a clear and easy understanding among all such, of whatever country, with regard to the means of treatment, is of the first importance. Alike for this purpose and to allow of advisable brevity, the use of one common medium of expression is decidedly preferable to any other system. We are therefore of opinion that the best and most natural result of the reform in prescribing, which is now in progress, will be to leave the body of the prescription in its present convenient though antique form, and to insure the most accurate observance of instructions to the patient by expressing these in the language of every-day life.—*Lancet.*

The Examination of Water.—Dr. Parkes, of London, after reviewing the various methods of examining water, concludes that chemical analysis, aided by microscopic examination, is sufficient in the great majority of cases to determine the amount of organic pollution of a water, and whether it is of recent date. In many cases the source of the pollution, whether from sewage or vegetable matters chiefly, can also be determined; but there is no possibility of ascertaining whether the water thus polluted is actually potent for evil or whether it may not be entirely harmless. Chemical analysis is powerless to deal with those cases of infinitesimal pollution of a pure water with infective material from the human body. Cultivation tests are equally powerless to cope with such cases. The only possible way of ascertaining the probable effects on the human system of drinking such water, is for the operator to perform the experiment on his own person—a course not likely to be pursued. The cultivation tests, of now practised, add very

little to the results attainable by chemical analysis. Micro-biology must undergo further development before germ-cultivation methods can be expected to throw much light on water-pollutions. Lastly, the sanitary survey of the source of the water, or its mode of storage, should always be carried out whenever any doubt exists as to the freedom of the water from all possible sources of contamination.—*Practitioner.*

ON THE TREATMENT OF FELON WITHOUT INCISION.—Unless it is contra-indicated I generally begin the treatment with a mild cathartic, the following being that commonly employed :

℞ Ex. colocynth. comp.
Mass. hydrarg. . . . . āā gr. x
Pulv. ipecacuan. . . . . gr. ii

M. Div. in pil. No. iv. SIG.—Take two at night and two on the second night after.

A tonic is administered from the first, one containing iron being preferred. The formula of this is as follows, the proportions being somewhat altered to suit individual cases :

℞ Magnesii sulphatis . . . . ℥ i
Ferri sulphatis . . . . . ʒ i
Acidi sulphurici dil. . . . ʒ iv
Syr. zingiberis . . . . . ℥ i
Aquæ . . . . . ad ℥ iv. M.

Sig.—Teaspoonful in water, through a tube, after eating.

In addition to this it is my custom to administer the sulphide of calcium from the beginning to the end of the treatment. I usually give it in the form of ¼ grain gelatin coated pills, one being given every two hours irrespective of food or other medicine. In order to have any good effect from this latter drug, it is essential that it should be fresh and pure. It is well to test the pills by biting them, when the characteristic odor of sulphuretted hydrogen becomes at once noticeable if the article is good.

Alcohol in all forms should be absolutely interdicted, and the malted liquors appear to be almost very harmful. The diet should be full and nourishing, but not stimulating. Milk is often given, sometimes in the form of punch and egg-nog between meals. Tea and coffee may be taken in moderation, but unnecessary and indigestible articles should be avoided.

The local treatment of felon consists simply in the constant and very thorough envelopment of the affected part in the diachylon ointment of Hebra, which, when properly prepared, forms a most agreeable and soothing dressing.

The author does not pretend to abort all cases, as he confesses that in many he gets suppuration and in some necrosis.—Dr. Buckley in *Jour. Am. Med. Ass'n.*

THE TREATMENT OF CHRONIC LEG ULCERS WITHOUT REST.—Baum, in the *Deutsche Medicinische Wochenschrift*, affirms that by adopting the following mode of treatment, ulcers of the leg may be cured while the patient follows his usual employment. First, the whole leg is most carefully washed with soap, shaved, and brushed with sulphuric ether. Then the ulcer is carefully disinfected with a three per cent. carbolic solution, applied by cloths dipped in it, which are kept on for half a day. The leg is then carefully dried and strapped, the strips crossing in front and overlapping at the edges. The plaster must be spread thickly on the linen ; breadth of each strip, four to five centimetres (1½ to 2 inches). Above this strapping eight layers of carbolic gauze are laid, and fastened with a carbolic bandage.

Every second day the bandage is taken off, and the carbolic gauze, especially over the situation of the ulcer, is thoroughly sprayed with a twenty per cent. carbolic spirit, then a fresh bandage is applied.

This treatment is continued for four weeks. On removing the whole dressing, the ulcer is found, in most cases, completely healed up. If a small spot should still be open, a small similar dressing is put on for a fortnight.

PROFESSOR RUNEBERG some time ago advanced the view that pernicious anemia may be dependent on the presence of intestinal tape-worm (*Bothriocephalus latus*). His views were snpported by some, and combated by others. A case which tends to support Runeberg's view is recorded by Schapiro in the London *Lancet*. A lad thirteen years of age came under treatment for intense anemia of a progressive type, charaterized by diminution of red corpuscles and of hemoglobin, with liability to cutaneous hemorrhage, epistaxis, etc., marked cardio-vascular bruits, pyrexia, and without any emaciation. It was not until the administration of anthelmintics had resulted in the evacuation of a large quantity of segments of bothriocephalus, that he began to regain strength and color. His recovery from that date was rapid. The writer attributed the anemia to the disintegrating action, on blood-corpuscles, of some chemical product of the parasite which was absorbed into the blood.

DURING the last year Dr. Hartamann (*British Medical Journal*) has treated otitis with instillations of several drops of a solution (one in ten) of carbolized glycerine with excellent results. Pain instantly disappeared, and the progress of the affection was checked. In cases where effusion existed, the relief obtained was equally great. M. Rohrer, who confirms M. Hartamann's statements, recommends a solution of twenty per cent.

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MATRICULATION IN MEDICINE.

The necessity for an extensive general education in medical matriculants must be apparent to all. Not only in the interests of science and public welfare, but also in the student's own best interest, does this necessity exist. That we, in Canada, have advanced the standard of matriculation in the past, and that our present examination is higher than that required by many schools of medicine, is perfectly true; but it is far from proving that we have arrived at the point from which no further advance can be profitably made.

The matriculation now insisted on by our Medical Council, cannot be said to err on the side of undue severity. Any youth of sixteen or seventeen years, of but moderate ability, having taken advantage of the public and high school privileges so common in Canada, finds but little difficulty in passing the required examination. But that such limited attainments thoroughly qualify him to comprehend and digest medical science, and to attend, with the greatest advantage to himself, our medical colleges is undeniably absurd. All physicians of experience must constantly admit, with humility and mortification, their deficiency in the knowledge of so extensive a science, after years of study subsequent to their college course, and must daily deplore their inability to completely grasp all the principles of so vast a subject. They find as they advance in knowledge that "Alps on Alps arise," that they are then only in the vestibule, and begin to despair of ever arriving at the inner temple. If then, after years of mental toil and conscientious devotion, at an age when our capacities are fully developed, we meet with so much difficulty, what shall we say of the youth, who enters college with a sufficient cramming at high school to barely enable him to pass the matriculation which is now required, at an age when his mental grasp is weak and the animal propensities largely prevail? His first term at college must be largely devoted to acquiring knowledge which he should have possessed prior to his entrance, and he must be handicapped during his whole medical course from having undertaken too much for the four sessions at college, while carrying the weight of his defective preparation in the start. Yet he often succeeds after this defective course, by the use of more or less cramming, in passing the final examinations with some credit as far as book-work and answering the questions prepared are concerned, but let him be tested practically by placing a patient before him, and he will most lamentably fail. Yet, in America hundreds of such are annually graduated, and passed out on the public, certified by an array of prominent and experienced medical men, as qualified to treat all the ills incident to humanity, and in whom a suffering public are advised they may confidently trust in the time of peril. But, notwithstanding the signatures of these experienced physicians to the certificates of qualification, they would hesitate to subject themselves or their families to the skill of these novices, whom they have solemnly affirmed to be duly qualified. How necessary then in the interests of the public as well as the profession, that a good mental training be made a *sine qua non*, prior to undertaking so difficult a study as medicine. At best, medical graduates must be very imperfect Drs. until experience has taught them many things. But a well trained and educated man has innumerable advantages in acquiring medical knowledge, and in perfecting himself as far as possible for the onerous duties of his subsequent life. "A little learning is a dangerous thing," and nowhere is this more evident than in our profession. That many medical schools on this continent demand a lower matriculation, and annually turn out many less qualified graduates on a suffering community is not to the point. We are in no

way responsible for this sad state of affairs. We can only express our sincere regret that a noble profession is thus prostituted for mercenary purposes, often we fear at the expense of the lives of many citizens. We should do our duty, by raising the standard, which action may to some extent influence others who are derelict in this direction.

The facilities for obtaining a fairly good education in this country at present must result in the coming generation being better educated than the present. If the profession do not advance with the age, we must fail to hold the superiority and prestige hitherto generally admitted by all, and lose the confidence and respect which for ages has been commanded by our superiority, and acknowledged by the world. The science of medicine is widening so rapidly, is so far reaching in its component factors, so extensive in its domain, so often dependent on almost every other science, and so comprehensive in its scope, that the most powerful intellect must fail to grasp its multiple sides unless somewhat intimate with the collateral sciences, and pretty thoroughly imbued with the principles of all. Therefore, if we cared little for the public well-being, we should in the interests of science, the prosperity of our chosen profession, and its elevated position among men, refrain from sending out incompetents.

A profession can only be judged, in the mind of the laity, by its exponents. Consequently those half educated representatives practising the profession on a low level, solely for the remuneration it affords, must naturally degrade and dishonor it in the eyes of all intelligent men, and bring it down to the level of a trade.

It has been argued that an extensive preliminary education would prohibit many from entering college, and deprive poor men's sons of the privilege of obtaining the profession, but it must not be forgotten that incompetent physicians may deprive both poor and rich not only of their sons but other members of their families altogether. It is hardly possible to conceive that either the student's income or the time spent by him in proper preparation, bears any relation to the essential necessity of a thorough qualification prior to trusting the welfare and lives of our fellow citizens in his hands.

That the teaching of the schools should be limited to the mental or financial capacities, of all who seek from whim, caprice or otherwise, to enter the profession, is so pregnant with danger to the public, derogatory to the profession, and seldom beneficial to the student in after life, that it is not worthy a moment's consideration. It is to be hoped, therefore, that the authorities may take into serious consideration the necessity of raising the standard of matriculation at an early date, with the view not only of protecting the public interests in the future, but also of maintaining our reputation as a learned profession, inherited from an illustrious ancestry, through an extended period of time. The noble record handed down to us must not be permitted to depreciate in our hands. Our ambition worthily seeks to add to that record, and maintain the honorable position so long held by the profession, as the vanguard in the army of science, struggling to subdue not only pain and disease, and postpone the dire event advancing upon all, but to enlighten the darkness of superstition and ignorance and obviate their untold evils to mankind.

THE FREE USE OF WATER AS A THERAPEUTIC AGENT.

The opinion that the civilized races are too sparing in the use of drinking water, has been advanced during the past few years by some of the leading therapeutists of the world, and the idea that this proposition is correct has taken a considerable hold, not only upon the majority of the members of the medical profession, but through them has permeated to the more intelligent of the laity. Water is said to be a solvent of more substances than any other fluid, which is nothing more than might be expected if we consider its vast importance in the whole system of nature.

Now, the unsparing use of this solvent may be looked upon as the surest method of flushing the system, and of keeping the various organs and their ultimate histological elements in good working order.

Regarding the use of waters at spas and mineral springs, there can be no doubt that the complete change in the mode of life which frequenters undergo while taking a course at one of these resorts, has as much to do with the favorable results obtained as the imbibition of quantities of nasty sulphurous or chalybeate water. The rest

and freedom from work and worry is perhaps more needed by the worn-out merchant or jaded politician than is iron or alkalies. Indeed, this principle is now so widely recognized that sanitariums are springing up in places where no medicinal properties are vaunted for the waters. To ladies who have gone through a "season," with its many anxieties, its intense excitement, and its reversing the periods of rest and wakefulness, the change also to an out-door life, pure air, healthful exercise, lessened excitement and pleasant, easy-going life at the seaside or health resort, is just what is needed to restore the over-worked nervous system to its proper balance, and give that sense of lightness and well-being which can only be felt when all the organs and tissues of the body are thoroughly depurated. Doubtless the waters at medicinal springs, taken in large quantities, are beneficial to many forms of disease. Why is it, however, that with all the refinement of analysis of our chemical laboratories brought to bear upon mineral waters, with a positive knowledge of their every constituent, even down to three decimal places in grains, that we are not able to get the same good results from the administration of such remedies, when artificially prepared, as are got when prepared in nature's laboratory? We can prescribe any or all of the salts found in the most noted springs of the world, to be taken out of a spoon with the utmost regularity; we may regulate the diet, the sleeping hours, the amount of work, even, which shall be indulged in by our patient, and yet get no such results as are got at health resorts. The difference in result is believed to be due, leaving out the advantage gained by the change of scene, air, etc., already referred to, to the greater dilution of the remedies contained in the natural waters. We said just now we could order our patient's remedies to be taken out of a spoon. If we ordered them taken out of a large tumbler, we should have better results with many of them. There is not enough plain water taken by most of us, especially in cities and towns. For social reasons women refrain from drinking water, and so often do men. Our working population, afflicted by no such restraints, and prompted to quench their thirst by plentiful draughts of water, are much better off in this respect. Such people rarely need a sojourn at a spa, and, indeed, get much of the benefits which visitors to such resorts obtain, by drinking largely at home. It flushes the system, bathes every tissue, dissolves and removes the products of tissue metamorphosis, keeps the skin more active, stimulates the kidneys to the removal of waste matter, and unloads the emunctories generally, and so leaves the cells in the best condition for functional activity, unclogged by surrounding debris and able to perform their respiration freely and naturally. Thus it not only removes old, worn-out matter, but paves the way for the re-construction of new material, and the whole system is as it were, from day to day rejuvenated. This explains the popular idea that drinking much water increases the weight of the body, which, under many circumstances, is absolutely true. Fuller pointed out the necessity of ordering large draughts of water when administering chalybeates. Ringer speaks of water as being a "true tonic, improving the vigor of the body and mind." The ordinary tumblerful of cold water every morning is an excellent hygienic measure; it washes out the stomach, clearing its membrane of mucous which would hinder the free secretion of the gastric juice, acts locally as a tonic to the gastric walls, stimulates the action of the bowels, and is, as Fothergill says, "a true hematinic, by its removal of waste matter, which hinders histogenesis." The same writer also states that the difference between no results from the administration of iron, and satisfactory treatment, lies in no more than this, the free use of water as a diluent.

THE WILLIAM F. JENKS MEMORIAL PRIZE.—The First Triennial Prize, of two hundred and fifty dollars, under the Deed of Trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The Diagnosis and Treatment of Extra-uterine Pregnancy." The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;" and that "the Trustees, under this deed for the time being, can in their discretion publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may in their judgment be sufficient for that purpose, and the essay or paper be considered by them worthy of publication. If published, the

distribution of said essay shall be entirely under the control of said Trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia." The prize is open for competition to the whole world, but the essay must be the production of a single person. The essay, which must be written in the English language, or if in foreign language, accompanied by an English translation, should be sent to the College of Physicians of Philadelphia, Pennsylvania, U.S.A., addressed to Ellwood Wilson, M.D., Chairman of the William F. Jenks Prize Committee, before January 1, 1889. Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The committee reserves the right to make no award if no essay submitted is considered worthy of the prize.

PUNISHING PATIENTS FOR THEIR OWN GOOD.—The following from the *Lancet* will be appreciated :—

A woman, at Berlin, brought a little boy aged four to be treated. Some local examination was necessary, which, though it could not in the least have hurt the child, caused him to scream and kick so violently that nothing could be done with him. The doctor did his best to soothe the little fellow, but all to no purpose. He then came to the conclusion that the child was crying merely from naughtiness, and, losing all patience, administered a few slaps on the buttocks for the cure of this affection. The mother became very angry, and, snatching up the child, carried him off, subsequently obtaining a summons against the doctor. The court, however decided that the defendant had slapped the child with the object of doing him good, and therefore discharged the case. A similar charge was brought some time ago against a St. Petersburg medical man in a Russian court by an officer's wife. Here also the court took the doctor's side. Those who have much practice amongst children know how tiresome they can be, especially when they are spoilt and poorly. In these cases it is often found needful to resort to some system of rewards, and even to punishments ; but it certainly is not advisable for a medical man to take upon himself to slap a patient, though he may be occasionally sorely tempted to imitate the example of the Berlin defendant. Whether an English court would regard the matter in the same light as the Berlin and St. Petersburg ones seem to have done, may be open to doubt.

There is no doubt we all have felt that the *argumentum baculinum* would often prove very efficacious in cases like the above. So also have we all felt what a blessing would be conferred upon many a patient suffering from an incurable disease, if the law permitted us to grant them a speedy and easy relief from their earthly woes. But it is to be feared that in either case abuses would creep in, which would more than counterbalance the good which might result.

ADVERTISING EXTRAORDINARY.—Following is an advertisement which we copy *verbatim et literatim* from a newspaper, printed not a thousand miles from Toronto :—

TO MY PATIENTS, PATRONS, AND FRIENDS.

Desirous of becoming acquainted with the most recent advances in Medicine and Surgery ; and of learning thoroughly and practically the best and latest treatment of all diseases, I have decided upon taking a short course in the now renowned Medical Schools of New York—in order that I may the better treat all who may honor me with their confidence. During my absence, Dr. ——— will take charge of my practice, and I am pleased to be able to recommend him to all my friends confident that he is ably qualified to give the best attention and treatment to all calling upon him. Dr. ——— has had the advantage of a full course in New York, and is careful, steady and attentive and will, I doubt not, give the best satisfaction. Hoping to meet all my friends again in a short time, I remain, Yours most sincerely,

———————.

We are glad to state that the *esprit de corps* of the profession in Canada is such, that any comment upon the above is unnecessary. We are weary of the subject of unprofessional advertising having written short editorial articles on it two or three times in the past two years. Hardly a week passes without our having our attention called to this subject, but lest we should lay ourselves open to the charge of always harping on one string, and of giving our readers our ideas on the subject *ad nauseum*, we usually pass such remainders over in silence.

IODINE TRICHLORIDE. — This preparation of iodine (*Lancet*) is a stronger germicide than carbolic acid, and nearly as strongly germicidal as the

bichloride of mercury. It is soluble in water, and is not poisonous. It may be used in aqueous solution in the proportion of 1 part to 1,000 of water. This solution may be used for the hands, wounds, or instruments. Langenbech speaks very favorably of it, and recommends it for gonorrheal injection in the proportion of 1 to 1,200. In dyspepsia due to bacteria, he gives the solution in teaspoonful doses every two hours. When used for the hands, instruments, etc., the slight discoloration may be relieved by the use of ammonia.

THE NITRITES IN ASTHMA.—Dr. Fraser (*Am. Jour. Med. Sci.*), writing on the cause of asthma, and the influence of the nitrites upon it, establishes the view that the dyspnea of asthma is caused by spasm of the bronchial muscles, and points out the value of the nitrites in its relief, and that the best therapeutic effects are not obtained by the inhalation of nitrites, but by their administration through the stomach. The facts seem to justify the assertion that their administration in this manner in asthmatic dyspnea or orthopnea is entitled to rank as one of the most valuable applications of pharamacology to the treatment of disease, an application at least as valuable as that in the painful agina of aortic disease, to which nitrites are at present almost restricted.

PERMANGANATE OF POTASH IN TOOTHACHE.—Dr. Popoff writes, says the *Br. Med. Jour.*, that he has most successfully treated upwards of three hundred cases of toothache from dental caries, by administering one-twentieth per cent. solution of permanganate of potassium in the form of a mouth-wash. The following is the formula :—

℞.—Potass. permang., 3 grains ; aq. destil, or fontanæ, 1 (Russ.) fl. pound, M. One tablespoonful to be taken in the mouth, every half-hour, and to be held therein on the affected side for several minutes. The most agonizing pain is said gradually to disappear in a few hours. The wash acts, besides, as an excellent deodorizer.

GANGRENE FOLLOWING THE USE OF COCAINE.—Dr. Nichols relates (*N. Y. Med. Jour.*) two cases of gangrene occurring in minor operations, cocaine having been used as an anesthetic. The first was the amputation of a crushed finger, where an injection of 15 min. of a 15% solution of cocaine hydrochloride had been used. On the fourth day gangrene was found, and re-amputation resorted to. The second case was one of circumcision, in which gangrene showed itself in the third day. The writer queries, what part, if any, did cocaine play in the causation of gangrene. Both patients were healthy, and were aged sixty-five and twenty-four, respectively.

CREASOTE IN PHTHISIS.—Numerous cases of improvement in phthisis by the administration of creasote, have been reported (*Lancet*). It is useful in the first and second stages, but not in the third stage of this disease. It may be given in capsules, pills, or in wine, glycerine, or fish-oil, to the amount of about 3 drops in 24 hours. It produces an alleviation of some of the most distressing symptoms, as lessened cough and expectoration ; fever and night sweats ; as also increase in body weight. The above seems to be fully substantiated by careful observation in numerous cases by prominent physicians, and is therefore worthy of the most serious and careful investigation by the profession.

FOR IRRITABLE BLADDER.—The following is said (*Maryland Med. Jour.*) to allay the frequent desire to urinate, with irritable bladder, when due to phosphatic deposit in the urine.

℞.—Acidi benzoici, ... ℥ij.
Boracis, ... ℥iij.
Aquæ, ... ℥xij.
M. Sig.—Tablespoonful three times a day.

This mixture has, upon two occasions, acted so efficiently in what was thought to be cystitis that cystotomy was dispensed with.

STROPHANTHUS.—The London correspondent of *The Therap. Gazette* says of strophantaus:—"Strophanthus is at the head of cardiovascular agents ; it rapidly raises the arterial pressure in cases of dilatation of the heart, and its power for good is shown by free diuresis and a speedy improvement of the subjective symptoms. Caffeine is regarded more as a direct renal stimulant, not a cardiac tonic, and to secure its full action it should be combined with digitalis, convalaria or strophanthus."

EHRENDORFER'S PENCILS OF IODOFORM.—These pencils (*Lancet*) have the following composition :—Two drachms and a half of iodoform and fifteen

grains each of gum glycerine and starch, to make one bougie. They have been favorably known to gynecologists for some time, but deserve a wider field. They continue to melt for three or four days and so keep the genital passages irrigated constantly during that time, with a mild stream of iodoform. They are said to be useful in cases of ruptured perineum, by simply introducing them into the vagina.

PROF. H. C. WOOD speaks highly of the power of the following (*Phila. Med. Times*) to abort an acute bronchitis:

R—Potasii citratis, ... ℥j.
Syr. ipecacuanhæ, ... ℥j.
Succi. limonis, ... ℥ij.
Aquæ, ... ℥iij. M.
Sig.—℥ij every three hours.

AMERICAN MEDICAL ASSOCIATION.—The thirty-ninth annual session of this Association will be held in Cincinnati, Ohio, on Tuesday, Wednesday, Thursday and Friday, May 8, 9, 10 and 11, commencing on Tuesday, at 11 a.m. Addresses have been arranged for the various departments by eminent men from all parts of the Union. Secretaries of Medical Societies are earnestly requested to forward at once, lists of their delegates to Wm. B. Atkinson, M. D., Secretary, 1400 Pine St., Philadelphia.

LAXATIVE GASTRIC TONIC.—Bardet has used the following combination (*Jour. de Méd.*) with advantage:

℞ Ext. fluid. cascara sagrad. ʒ 5.
Tinct. nucis vom. . . . ♏ 30.
Aquæ destil. . . . . ʒ 28¾.
Syrup. simpl. . . . . ʒ 3¾.—M.
S.—ʒi. p.r.n.

FOR SPERMATORRHEA. — The *Med. Summary* says:—The monobromide of camphor has been successfully used In the treatment of spermatorrhœa, where a host of the usual remedies had been administered with no satisfactory results; finally, the monobromide of camphor was given in two to three-grain doses, four times daily, with prompt effect and perfect cures.

INCONTINENCE OF URINE.—Dr. W. S. Cline, of Tom's Brook, Va., writes as follows to the *Med. World*, in reference to an enquiry by a correspondent as to treatment of incontinence of urine. I he will get 100 Parvules cantharides, $\frac{1}{50}$ gr., pre pared by W. R. Warner & Co., and give one thric daily, he can cure his patient, and she can drink all the water she wants. I never withdraw usua diet. Have never seen a failure.

TO ALLAY ITCHING.—The following is recom mended:

R.—Sodii carbonat., ... ℥ss.
Morphiæ sulph., ... gr. vj.
Aq. sambuci, ... ℥j.
S.—For external use. M.

LITHIUM AND ARSENIC IN DIABETES.—Vigie recommends (*Therap. Gaz.*) the following:

R.—Lithii carbonat., ... gr. iss.
Sodii arseniat., ... gr. $\frac{1}{60}$.
Ext. gentianæ, ... gr $\frac{3}{4}$.

For each pill. To be taken morning and night and continued until sugar has disappeared from the urine.

BICARBONATE OF SODA IN NOCTURNAL INCON TINENCE.—Dr. Sell recommends (*Le Practicien*) a a remedy which has often proved successful in nocturnal incontinence of urine, bicarbonate o soda in teaspoonful doses at bedtime. He state that the patient is either completely cured o greatly benefited.

PROF. WAUGH (*Phil. Med. Times*) prescribe the following for myalgia in a strong man:—

R.—Ammon.-chlorid., . . . gr.xxx.
Ext. belladon., ... gr. ½. M.
Sig.—As a dose three times a day.

ANTIPYRINE IN THE "ALGIAS."—Dr. Poole writing to the *Med. Times*, speaks highly of th above remedy in the "algias." He has had only good results from its use. Even that *bête noir* sciatica was relieved in the case of a woman of 57 by the exhibition of a few fifteen grain doses The writer says he has not found the same benefi from antifebrine.

BRITISH DIPLOMAS.—The following gentlemen have received the L.R.C.P. London at the late ex aminations:—Dr. W. P. Caron, T. Ovens (Trin.), H. C. Scadding, W. R. Shaw (Tor.), and F. J. White, of Montreal. J. W. Peaker, M.B., (Tor.), has taken the M.R.C.S., Eng.

STERILITY IN MEN.—Kehrer, of Heidelberg (*Med. News*), says the percentage of sterility n men is 33.32.

BORACIC ACID FOR STYES.—A three-per-cent. solution of boracic acid dropped on the stye, several times a day, is said to effect a cure and prevent a return of the trouble.

Dr. Afanasieff has succeeded in finding (*Lancet*) and cultivating the bacillus of whooping cough.

PROF. WOODBURY advises the administration of sodæ phosphat. to children with clay-colored stools, instead of the routine dosage with mercurials.

IT is said that Prof. Unna, during his visit to America, received a consultation fee of $6,000 from a wealthy lady of New York.

IT is stated (*Lancet*) that enveloping the limb for one night in flowers of sulphur, will cure sciatica. The urine next morning smells strongly of sulphuretted hydrogen.

A TEACHER said to a member of a certain State Board of Health who was investigating the condition of her room, "No, I haven't any ventilators: I don't see any use for them." "But how do you keep the air pure?" "Oh, I've got a thermometer."

THE *Medical Record* makes the request of its contributors to send in their manuscripts folded, not rolled. This suggestion is excellent and will save phosphates to medical editors. The *Record* says: "A voluminous manuscript which has been rolled up for a long time, is a most unmanageable thing."

JONATHAN HUTCHINSON makes the suggestion that the long-continued administration of arsenic in large doses may produce a form of cancer closely allied to epithelioma, but presenting peculiar characteristics.

THE giant Winkehoneyr now on exhibition in London, is eight feet nine inches in height. He falls short of the famous Irish giant O'Brien or O'Byrne, whose skeleton is preserved in the museum of the Royal College of Surgeons, by some inches.

PROFESSOR WAUGH has had much success with ext. jaborandi fl. in erysipelas. He administers twenty minims every two hours till perspiration commences. If the disease recur he resumes the use of the drug.

WHEN it is a question of nerves, says the *Med. and Surg. Rep.*, the power of imagination is supposed to be stronger in women than in men, but this was not shown in a recent hospital experiment. Dr. Durand, wishing to test the practical effect of mind disease, gave a hundred patients a dose of sweetened water. Fifteen minutes after, entering apparently in great excitement, he announced that he had, by mistake, given a powerful emetic, and preparations must be made accordingly. Eighty out of the hundred patients became thoroughly ill, and exhibited the usual result of an emetic; twenty were unaffected. The curious part of it is that, with very few exceptions, the eighty "emeticised" subjects were men, while the strong-nerved few, who were not to be caught with chaff, were women.

Books and Pamphlets.

TEXT-BOOK ON MATERIA MEDICA AND THERAPEUTICS. By Robert T. Edes, A.B., M.D., Professor of Materia Medica in Harvard University, etc., etc. Philadelphia: Lea Brothers & Co., 1887. Toronto: Carveth & Co.

This work is modest as to its size, and we believe fairly fulfils the author's expectation of presenting to the student and young practitioner "a concise, practical working view of the present state of Pharmacology and Therapeutics." The work has our thorough approbation in several respects, but in none more than in the omission of descriptions of crude drugs, which descriptions, so far as utility to the learner is concerned, would "be far surpassed by a few hours in a cabinet of Materia Medica or in a well furnished drug store."

The author perhaps inclines too much to condensation when discussing important drugs. We do not believe that 'compends' are the kind of reading most beneficial to a student, or that short, terse statements of facts are easiest understood or remembered.

The work in hand does not compare with those

of Bartholow or Wood, but will, we believe, be useful to the student who has not time to read more extended works.

A COMPLETE HAND-BOOK OF TREATMENT. By William Aiken, M.D. Edin., F.R.S. Edited by A. D. Rockwell, A.M., M.D. New York: E. B. Treat & Co. 1887.

This volume contains in a short compass the most important points on the treatment of disease as met with in every day practice We have had occasion to consult it not a few times during the past month, and have found it very useful when time did not permit the perusal of everything that could be said upon any certain disease, but did allow of a glance at the best and most recent methods of combating it. We recommend the book as of great practical use. The printing and proof-reading are not what they should be, considering the high standard of excellence American medical works have attained in these respects.

LEA BROTHERS & Co., of Philadelphia, will shortly publish *A Clinical Atlas of Venereal and Skin Diseases, including Diagnosis, Prognosis and Treatment*, by Professor Robert W. Taylor, M.D., formerly President of the American Dermatological Association, and Joint Author of Bumstead & Taylor's *Pathology and Treatment of Venereal Diseases*. The work will be issued in eight parts, aggregating 58 large folio chromo-lithrographic plates, measuring 14 x 18 inches, and containing about 20 figures, many of them life-size, executed with the utmost faithfulness and beauty of detail. These plates will delineate typical cases from the practice of the author, and selections from the entire literature of Europe, including among others the works of Cullerier, Fox, Fournier, Hebra, Hutchinson, Kaopsi, Neumann and Ricord. The text will deal chiefly with the practical aspects of the subjects, and will be illustrated with a series of unusually large engravings, executed specially for this work, and drawn principally from original matter in the possession of the author.

DISEASES OF THE SKIN. By John V. Shoemaker, A.M., M.D., Prof. of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital, of Philadelphia, etc New York: D. Appleton & Co. Toronto: Williamson & Co.

This is a large work of 633 pages, and profusely illustrated with colored plates. It is a treatise on the skin which we can recommend to every physician as a work of reference, and in which he will find the latest views on pathology and treatment. At the end of the work are a number of formulæ, which will prove very valuable as a reference. It is certainly a very complete book.

DEFFERENTIAL DIAGNOSIS OF THE DISEASES OF THE SKIN. By Condict W. Cutler, M.S., M.D., Assistant Physician for Skin and Venereal Disease at the New York Hospital. New York: G. P. Putnam & Sons.

This a tabulation of the various diseases of the skin contrasting each with others it may resemble. A work in which one can quickly find the main points in diagnosis.

THE EPISTLES O' AIRLIE is the title of the collection, in book form, of the "Airlie" letters which have appeared in *Grip* during the last few years. Mr. J. W. Bengough has drawn special illustrations for this edition, and we think the book is destiined to become popular.

WHY I JOINED THE NEW CRUSADE. A Plea for the Placing of Taxes on Land Values only. By Richard T. Lancefield. Delivered before the Anti-Poverty Society of Toronto. Grip Puulishing Co., Toronto, 1887.

Births, Marriages and Deaths.

At Kobe, Japan, January 9th, Rev. Wm. Cassidy, M.D., Medical Missionary to Japan, late of Toronto, aged 33 years.

At Sherbrooke, Mr. Harry Langton Gilbert, M.D., F.R.C.S., Eng., aged 34.

At Bedford, Que., on 3rd February, James McNabb Cassels, M.D., aged 48.

On 4th February, at 283 Church St., Toronto, Richard Zimmerman, M. D., L. R. C. P., Lond., aged 36.

On 8th February, at Winnipeg, Albert G. Jackes, M.D., aged 44.

At New Glasgow, N. S, February 12th, George Murray, M.D., ex-M.P.P., for Pictou.

At Toronto, February 13th, John H. McCallum, M.D., aged 47 years.

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Original Communications.

CASES IN PRACTICE.*

GEORGE T. M'KEOUGH, M.D., M.R.C.S.ENG., CHATHAM.

Poisoning by Corrosive Sublimate from a Vaginal Tampon.

Mrs. J. W., aged 36 ; multipara, pregnant about three months, although she was not aware of the fact, as she had been losing blood periodically since the weaning of her last baby. I was sent for on the present occasion on account of profuse flooding and before I could reach her, some miles in the country, she had lost a large quantity of blood and presented on my arrival a decidedly anæmic appearance. About six months previously I had made an examination of her pelvic organs and found a large bilateral laceration of the cervix uteri, a profuse cervical catarrh, and a hyperplastic condition of the entire uterus. No treatment was however inaugurated except the use of hot water vaginal injections. I now could merely feel through the torn, cicatrised and but slightly dilated os, the contents of the uterus. I immediately proceeded to prepare a tampon, but unfortunately finding my boro-glycerine bottle empty, the medicinal agent I usually employ for disinfecting my tampons, I put about 5 grains of bichloride of mercury and a pinch of table.salt into a bowl containing about a pint and a half of warm water, moistened half a dozen good sized pads of cotton batting with the mixture, and with the aid of a Sims' speculum placed them in the vagina firmly around the uterus. I left her, expecting to return the following day. A few hours later, however, I was again summoned, and found my patient suffering severely from pelvic pain, not intermitting, nausea, and a general feeling of illness. Her temperature was normal, pulse quick and physiognomy distressed and anxious. Suspecting the probability of poisoning by the mercuric salt, I immediately removed the tampon, and syringed the vagina thoroughly with hot water and afterwards with a mixture of the white of eggs and milk. During the three following days she suffered from severe pains in the abdomen, frequent dysenteric stools, nausea, vomiting, stomatitis and general depression. She was given brandy and water, milk and raw oysters freely. A mixture of pot., chlor. suppository of opium and belladonna, with frequent vaginal injections of albuminous mixtures, constituted the treatment. The uterine contents becoming offensive with rise of temperature, denoting commencing septicæma, they were removed upon the third day with finger and curette, when the temperature became normal and remained so. After a few days of great anxiety to me, she quite recovered.

This case occurred in my practice some time ago, before mercurial poisoning from the generative tract was as well recognized as it is at present. At the time I was not sure whether the absorption took place from the vagina or injured cervix. I have learned since that usually toxic symptoms are the result of injection fluids being retained in the vagina and absorption occurring from the vaginal, mucosa. The uterus after an injection usually contracts and expels all fluids, which however, unless measures are taken to prevent it, may be retained in the vagina. In my case absorption probably took place both from the vagina and uterus, the anæmic condition of the patient facilitating the accident.

Malarial Hæmaturia (?)

A. Mrs. S., aged 36, a robust, red-faced English woman, recently arrived in this country. Mother of several healthy children. No history of a hæmorrhagic diathesis in her family. Consulted me on account of passing bloody urine, which had begun the day previous. In other respects felt tolerably well. Ordered gallic acid and ergot, which was taken for some days without controlling the hæmorrhage, when she was seized with what seemed a typical paroxysm of ague, for which quinine was ordered. Her stomach being irritable, the first mixture was discontinued. After taking quinine for twenty-four hours, the urine rapidly

*Read at the Chatham Medical and Surgical Society, March 2nd, 1888.

cleared up and there was no subsequent return of fever. On two subsequent occasions within a year from her first illness of this nature, she had two other similar attacks of hæmaturia without fever. Quinine was given on both occasions with immediate improvement.

B. Annie C., aged 3, had a chill followed by fever one afternoon, the following morning she played with other children and seemed apparently well. That afternoon she had fever again, and a severe convulsion; during the night following she passed bloody urine frequently. Quinine was administered during the second paroxysm of fever and continued for a day or two. The urine cleared up on the third day of her illness, during the afternoon of which she had a slight fever; she was, however, soon quite well. In both these cases the microscope revealed blood corpuscles apparently unchanged in shape. The nature of the morbid action in these cases is inferred to some extent by the mode in which they were effected by the remedial agent employed. The evidence, if not demonstrative, is highly probable.

Hysterical Vomiting.

Miss S., aged 19, a hyper-sensitive, active, highly strung young lady, neither petite nor corpulent. Had been ill for a year, vomiting daily once or more; there was no loss of flesh, and no symptons pointing to organic lesion. Her appetite was good, tongue clean, and bowels regular. She complained of heaviness of her limbs, weariness, melancholia, frontal headache, burning sensations in the stomach, cardialgia and gastralgia. She had been under the care of several physicians, and every known remedy had probably been tried and failed. Her uterine functions were normal, with the exception of slight dysmenorrhœa. Physic and diet evidently having been faithfully and systematically used without any encouraging results, and no lesion being discoverable, to account for the persistence of the vomiting, the difficulty was supposed to be neurotic. She was advised to desist from medicine entirely, to pay as little attention to the stomach as possible, to direct her attention to other subjects and to go out into the world. Her friends were instructed to pay little heed to her complaints or her vomiting. As a result, within a month, the vomiting almost ceased, and in a very short time she became, instead of a "hysterical vampire," a cheerful, useful member of society.

Sudden Deaths in Pneumonia.

W. K., aged 30, a young healthy man with a good family history, but at times somewhat intemperate in his habits. Had contracted pneumonia which progressed typically but favorably until the tenth day of his illness. I saw him on the morning of that day, when his condition appeared as propitious as could be desired. Temp. normal, resp. 22, and pulse 70. There were, however, some crepitations and bronchical breathing, with dullness in the lower half of right lung posteriorly. He was in good spirits and hungry. He felt so well that evening, that he requested his mother, who was nursing him, not to remain up during the night. She was however awakened by him, shortly after she had retired, and found him suffering severely from a cramp in one of his legs. Rubbing the limb briskly not relieving the pain, he insisted upon getting out of bed and walking it off. After taking about a dozen steps, assisted by his mother, he asked in a feeble voice to be laid on the bed again. On doing so, it was noticed that he seemed to gasp once or twice and then cease to breathe. His thoracic viscera were examined about 24 hours after death. The middle and inferior lobes of the right lung were found in a condition of red hepatization,—there was also about seven ounces of bloody fluid in the right pleural cavity. The right side of the heart and pulmonary artery were filled with clotted blood, no evidence of endocarditis was discovered. About the same time, Dr. Bullis of Dresden lost a case of pneumonia that Dr. Holmes had seen in consultation, under somewhat similar circumstances. His patient was progressing favorably towards convalescence, when some one unwisely gave the alarm of fire just outside her room. She suddenly sat up, got out of bed and almost immediately fell back dead.

This formidable accident of sudden death in pneumonia, although not usually referred to in the text books, is one that must be apprehended in all cases until convalescence is fully established. It usually occurs during the period of supposed convalescence, when an early and perfect restoration to health is prognosed by the physician and looked forward to by the patient and friends. Sudden arrest of the heart's action, which is the cause of

ıese unfortunate occurrences, may be due to heart ot, owing partly to the hyperinotic state of the lood in pneumonia and partly to debility of the ıuscular walls of the heart from parenchymatous egeneration of its muscular tissue, or to endocar- itis. The heart in this damaged condition may ill be capable of doing its work with the body at st in a recumbent posture; but any sudden eleva- on of the body to the erect posture, imposing an xtra strain upon the organ, might cause a fatal aralysis. The practical lesson is obvious.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

HOW ARTERIAL SEDATIVES ACT.

Ergot of rye is an agent which produces in a ıarked degree contractions of involuntary muscu- ır fibre everywhere, but whose effects are especially een in the arterioles and uterus. Must not a niform law or rule govern the occurrence of such ontractions? We have seen that they occur best nder a deprivation of nerve action, and are ever so complete as in the general death of the ody. How then can ergot be regarded as a timulant? Who would ever think of administer- ıg it in cases of faintness and exhaustion as a estorative of nerve energy? Must it not act, ke nerve section and nerve paralysis, in lessening ıe tone of the vascular and motor nerves, so etting free the contractile energy of the arterial nd uterine muscles, which contract accordingly? Dr. Sidney Ringer grows enthusiastic over the ction of aconite in acute congestion of the ton- ls, and that, too, in doses too small to reduce the ction of the heart. Aconite undoubtedly causes ontraction of the arterioles, and accordingly on ıe theory of the day it must be classed as a timulant, as it actually has been by some authors, r. Edward Meryon, M.D., F.R.C.P., for instance, ho holds that "it stimulates the dormant fibres Remak and by so doing diminishes the calibre of the arterioles" (*a*). Errors of this kind must be charged to the misleading guidance of an erroneous theory. Aconite is a profound paralyzer, and in small doses, by lowering the activity of the vaso-motor nerves, it frees the contractile power of the muscular bands of the arterioles, which contract accordingly, lessening or curing congestive states.

Is not this precisely the *role* of the galvanic current, when brought to bear upon the cervical sympathetic, say in exophthalmic gottre? The thyroid gland and its appendages are being overfed by dilated arteries. Bring about contraction of these arterial tubes, by lowering the activity of the vaso-motor nerves in the way just indicated, and the congestion and hyperplasia are relieved if not cured. But the electric current, for therapeutic purposes, has been classed as a stimulant! So has strychnia; so ought to be prussic acid, for it, too, causes spasms and convulsions of muscle! So is fatal hemorrhage. All stimulants, as well as aconite, on the theory of the day! It would require a volume to elucidate these points, and I must condense what I have to say into a few paragraphs.

STRYCHNIA A PARALYZING AGENT.

Dr. Harley has shown that strychnia probably acts by preventing the oxygenation of the blood, which Dr. C. B. Radcliffe very properly holds cannot be the *role* of a stimulant. Dr. Ringer tells that "after traumatic and strychnia tetanus the functions of the motor nerves and muscles are depressed; the motor nerves conveying impressions imperfectly." But may not this motor nerve depression be due to a reaction from previous over excitement? Dr. Ringer says no! and adds, "Strychnia directly depresses motor nerves, for large doses kill without exciting convulsions, when the motor nerves are found to have lost their conductivity" (*b*). Which in physiological language means that the nerves are paralyzed. Dr. W. A. Hammond has recounted an experiment performed by himself and Dr. S. Weir Mitchell, which, he says, "shows that the action of strychnia is to destroy the nervous excitability from the centre the periphery" (*c*). Dr. Ringer further furnishes

* Read before the Physiological Section of the Ninth ternational Medical Congress, held in Washington, ptember, 1887.

(*a*) Rational Therapeutics, p. 52.
(*b*) Therapeutics, 5th American Ed., p. 499.
(*c*) Dis. Nerv. Syst., p. 539.

strong evidence that paralysis, and not over-action is the condition of the nerve centres in tetanus. He instances "certain poisons, like gelseminum and buxus sempervirens, which produce *at the same time* both weakness of natural co-ordinated reflex action, cord paralysis and *tetanus*." He says "it is impossible that the tetanus should depend on stimulation of the cord, for we have seen that the tetanus was preceded by considerable depression of the cord and continues until the depression ends in extinction of all cord function;" or, as he says again, the tetanus "occurred in a dying cord" (*d*).

In strychnia poisoning, death occurs from asphyxia (*e*), with its contracted and empty arteries and engorged veins:—the precise condition of the vascular system produced by destruction of the spinal cord, as in pithing, as already shown in a previous page. Do not the foregoing facts show that strychnia does not kill as a stimulant, or excitant, of the spinal cord? Moreover, medical literature clearly shows the value of alcoholic stimulants in strychnia poisoning, but I cannot delay to quote it. On the other hand, chloral hydrate, which has some reputation in these cases, is "not by any means antagonistic" to the action of strychnia. It acts by simply lessening the contractile energy of the muscles, like other anæsthetics, by de-oxidizing the blood, and thus retarding the chemical process in the muscle, whereby its contractile force is generated. In this way the convulsions are arrested, and time gained for the elimination of the poison. But dangerously large doses—seven or eight grammes—(about two drachms)—are required for this purpose (*f*). "Strychnia affects paralyzed, sooner than unparalyzed muscles," writes Dr. Ringer: but this is not exact. Strychnia does not affect the muscles at all, as Dr. R. himself shows; and the muscles are not paralyzed in the cases to which he refers. What he means is that strychnia induces twitches and spasms in muscles whose nerves are enfeebled, sooner than in muscles whose nerves are acting normally. Why is this? If strychnia were a stimulant, would it not sooner excite vigorously acting nerves than enfeebled ones? But since its effect is to cause "depression of the moto nerves," nerves already suffering in this way hav their activity more easily extinguished, and thei muscles set free, than is the case with healthy nerves. The same thing is equally true of th other paralyzer, electricity. Twitches, tremors spasms and tetanus are all but varying stages o nerve paralysis and of muscular freedom.

ELECTRICITY A PARALYZING AGENT.

Prof. Tyndall tells us that a mere trace of iro in the coils of a galvanometer, of even suc splendid instruments as those used by Prof. D Bois Reymond in his researches on animal electr city, caused a fallacious deflection of the needl to the extent of thirty degrees and more (*a*.) It i therefore not to be wondered that erroneous co clusions were sometimes arrived at in experiment so beset with fallacies, even when conducted a parently with the greatest care. So mysterious force, which exhibits itself alike in the lightning flash, in a tiny spark and the quiver of the emi ently sensitive protoplasm of a muscle, might we excite wonder and enthusiasm. As investigatio proceeds, however, the exaggerated ideas as to th important part played by electrical currents in th phenomena of nerve and muscle, and even of li itself, which prevailed some years ago have bee rapidly on the decline among students of electr physiology; but will doubtless linger long in th popular and even in the professional mind. B electricity is not nerve force, nor can it cause th generation of nerve force, which is impossible in mere nerve trunk separated from its nervo centre. This must be obvious. If it produ effects equivalent to a loss of vital action such occurs in the death or destruction of portions the nervous system, it must be classed as a sedati and not as a stimulant. In the experiments abo to be mentioned the currents employed are tho used for ordinary physiological and therapeut purposes.

The effect of such a current applied to the i ferior laryngeal nerves is to induce spasm of t muscles of the glottis. "The rima is complete closed" (*b*). That is to say, it does precisely wh we have seen above is done by section and pa lysis of these nerves. Applied to the lower en

(*a*) London *Lancet*, Feb. 17, 1887, p. 288; *Braith. Retros.*, July, 1887, p. 98.
(*b*) Fothergill, Antag. Ther. Agents, p. 55.
(*c*) Lyman's Anæsthetics, Wood's Library, pp. 264, 267, 275.
(*d*) Heat as a Mode of Motion, p. 34.
(*e*) Dr. B. Sanderson, Handbook, p. 308.

of the vagi it causes contraction of the œsophagus and stomach and "in most cases vomiting" (*a*). Just as we have before seen, results from section of those nerves. We have had proof that section of the spinal cord and of vaso-motor nerve trunks induce contraction of corresponding arterioles. Similar effect is produced by electrization of the same parts, the calibre of the arteries being sometimes reduced to one-sixth of their normal size (*b*).

Dr. M. Foster tells us that section of the spinal cord at the medulla, or in the dorsal region, arrests the secretion of urine; and such a section of the cord is of course a paralyzing act. He also tells us that the electrization of the spinal cord below the medulla also arrests the secretion of urine. Then is not this a paralyzing act also? It is unnecessary to multiply examples. Shall we continue to call an agent a stimulant and refer to it as an excitant of nerve activity, the ordinary effects of which on nerves are equivalent to nerve section, nerve paralysis and death!

MILD CURRENTS PARALYZE.

It is sometimes said that powerful currents may paralyze and even kill, but that mild or weak currents merely stimulate or excite. Is there any proof of this? Where in the records of electro-physiology do we find a claim for opposite effects from weak and strong currents? It is true that we are cautioned against the depressing effects of long continued applications of even mild currents. But this is not the present point. The short *seance*, with its mild currents, may and probably does afford a simulation of increased vigor, but this is mainly due to the moderate exercise which it gives the muscles and their consequently improved nutrition (*c*); perhaps also in some degree to the mental impressions of the patient. The longer *seances*, with stronger currents, are fatiguing and exhausting in proportion as they are depressing or paralyzing.

Is it not true that the weakest current which can affect a muscle at all, causes a momentary contraction of the muscle; and that the strongest current that can be borne during life, or that can be brought to play upon a still irritable nerve and muscle after death, simply produces a more vigorous effect of the same kind; the contraction becoming continuous in spasm or tetanus? It is never contraction on one hand and relaxation on the other, unless, indeed, other conditions intervene and muscular contractile energy is at an end. As a matter of fact, weak and strong currents act precisely in the same manner, and differ only in the lesser or greater contraction of the muscle which they produce. The process is a uniform one, as indeed it must be, since a purely physical force cannot change its character, and play fast and loose in the mode of its operation.

The treatises on this subject bear ample evidence of the paralyzing effects of electrization when even weak currents are used, as could only be the case for therapeutic purposes. Althaus found that the electric current produced an anæsthetic and paralyzing effect on the ulnar and sciatic nerves. Drs. Beard and Rockwell tell us that "in rhinitis, pharyngitis and laryngitis,"—where only very mild currents are admissible,—"they have for years been accustomed continually to make use of the benumbing effects of electrization" (*d*). Even "weak electrization of the upper part of the neck may arrest respiration," as well as produce spasm of the glottis and of the muscles of inspiration (*e*). Currents necessarily weak, because applied to the neck of "a sensitive young lady," induced anæmia of the brain, with drowsiness and other effects indicative of arterial contraction (*f*). Other authors equally allude to the "paralyzing effects of the constant current" (*g*). From these considerations I hold that there is no evidence whatever that weak and strong currents produce opposite effects, or that one may paralyze and the other stimulate.

DIRECT AND INVERSE CURRENTS.

A great deal has been written about the different effects of direct and inverse currents. Dr. J. Russell Reynolds, in reply to the question, "What current should I use to relieve pain and spasm, the direct or inverse?" answers:—"All I have to say is that so far as I have seen it does not make the smallest difference. Theoretically it makes a very great difference, but practically it makes none" (*h*). Now, I think that the evidence showing that both these currents are paralyzing is

(*a*) Meyer's Prac. Elec. Hammond, p. 87.
(*b*) Weber-Meyers, Ib., p. 88.
(*c*) Drs. Beard and Rockwell.

(*d*) Med. and Surg Elec., p. 123.
(*e*) Ib., p. 133. (*h*) Ib., p. 134.
(*f*) Valentine, Matteucci, Eckhard, Meyers.
(*g*) Clinical Uses, etc., p. 18.

indisputable. Take the direct current first. A nerve-muscle preparation is prepared. To the middle of the nerve trunk a salt solution or the poles of an induction battery are applied, and in either case the effect is so regulated as just to fail to cause a contraction of the muscle. If, now, the poles of a galvanic battery are applied to the distant end of the nerve-trunk, the P. pole furthest from the muscle, so as to produce a direct current, throwing the lower end into catelectrotonus, the muscle will contract at once. Hence the direct current issaid to increase the irritability of the nerve. But electricity is not nerve force, and nerve force cannot be generated in a mere nerve trunk. The true change in the nerve is not one of increased strength or vigor; it is simply that the feebly paralyzing action of the salt solution or of the induction battery has been supplemented or re-inforced by the additional paralyzing wave of the direct current, and nerve force is for the moment annulled. What is just asserted is nothing new. Thus, "According to Volta, both directions of the current are depressing in their effects" (*a*). Prof. Matteucci found that "the direct current" not only "diminished the excitability of nerves," but produced in them "a temporary paralysis" (*b*). Dr. W. B. Carpenter wrote "The direct current weakens and at last destroys the excitability of a nerve" (*c*). So much for the direct current.

The inverse current produces in the nerve trunk, between the electrodes and the muscle, a condition of analectrotonus, which is admittedly one of "diminished irritability," which term is in itself an acknowledgment of lowered vital activity, which can only be accounted for as a degree of paralysis, and is induced by weak as well as relatively strong currents. Dr. C. B. Radcliffe states of M. Eckhard:—"This very able physiologist has ascertained that so long as the inverse galvanic current is closed it is impossible to produce contraction of the muscle by pinching, pricking or otherwise acting on this part of the nerve . . . . which is consequently in a state of suspended irritability (*d*). This is a state of paralysis, because "a nerve that is deprived of its irritability can neither receive impressions nor transmit them" (*e*).

Drs. Beard and Rockwell say that "in regard to the differential action of the ascending and descending currents there has been an almost infinite amount of shallow observation and impulsive writing." These writers offer ample evidence that the effects in question are due, *not to current direction*, but to *the physical effects of the poles*, at one of which acids accumulate and alkalies at the other.

(*To be Continued*).

(*a*) M. Meyer, p. 57.
(*b*) Braith. Epit., Vol. II, p. 661.
(*c*) Hum. Phys., p. 351.
(*d*) Epilepsy, etc., p. 175.
(*e*) Epilepsy, etc., p 78.

NOTES ON THE CHANGES WHICH OCCUR IN THE EYE DURING THE PROCESS OF DISSOLUTION AND IMMEDIATELY AFTER DEATH.

BY GEORGE STERLING RYERSON, M.D., C.M., L.R.C.S.ED.
Professor of Ophthalmology and Otology in Trinity Medical School.

The opportunities for observation of the eye, ophthalmoscopically, immediately before and after death, are comparatively rare. One must happen on the right moment to make the visit. Consenting friends or the absence of friends are likewise necessary. Insensibility on the part of the patient is also desirable. It happened to me once to meet with this combination of circumstances; it was in this wise. During the winter of 1876-77 I acted at times as locum tenens for the house surgeons at the London Hospital, and particularly for Mr. Jonathan Hutchinson's. It was thus I happened to be in at the right moment. One evening about six o'clock a man was brought in who had been injured by a bale of goods falling on him. He was unconscious and the lower extremities were paralysed—apparently from dislocation of the spine. Respiration gasping; pulse uncountable. Mr. Buckland, one of the house surgeons, suggested that we should ophthalmoscope him, which we accordingly did. The media were clean and transparent. The retina and optic disc were pale. The arteries of the retina were scarcely perceptible. There was an occasional pulsation of the veins, which were irregular in calibre, looked as though they had clots in them, being thick at one point, then very thin. As life ebbed away all

movement in the veins ceased. A peculiar haziness stole over the fundus obscuring the view of the parts. I have seen some kind of ground glass which looked like it. I do not know whether it began in the lens or in the vitreous. A few minutes later the cornea became wrinkled and nothing more was discernible of the fundus. The pupil was moderately dilated. The man lived for ten minutes after having been brought into the hospital. I do not remember whether there was a post mortem or not. I have never seen any account in which the jerky pulsation in the veins and the apparent formation of clots in them are mentioned. The ophthalmoscopic examination of the eye after death is of much practical value and the most positive evidence of death. It would be impossible for a person to be buried alive, as in a prolonged trance, after such an examination. It could also be used to detect malingerers, such as criminals feigning death to enable them to attempt to escape from prison. Physicians unaccustomed to the use of the ophthalmoscope could determine the matter by concentrating the light upon the cornea with a 2½ inch convex lens (oblique illumination), when the cornea will be seen to be wrinkled, which never occurs during life so long as the fluids are not allowed to escape from the eye.

REGULATIONS FOR ARMY AND NAVY MEDICAL DEPARTMENTS AND INDIAN MEDICAL SERVICE.*

ARMY MEDICAL SERVICE.

Every candidate desirous of presenting himself for admission to Army Medical Service must be unmarried, not under 21 or over 28 years of age. Must produce a certificate of birth from the District Registrar, or affidavit from one of the parents; also a certificate of moral character from parochial minister. Candidate must make a declaration that he labors under no mental or constitutional disease or any imperfection or disability. His physical fitness will be determined by a board of medical officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without aid of glasses. Moderate degree of myopia not a disqualification. Candidate must possess two diplomas, one to practise Medicine and the other Surgery in Great Britain or Ireland, and must be registered under the Medical Act in force at the time of his appointment. Certificates of registration, character, and age must accompany the declaration when filled up and returned.

Candidates will be examined by Examining Board in following compulsory subjects, and the highest number of marks will be distributed as follows: Anatomy and Physiology, 1000; Surgery, 1000; Medicine, including Therapeutics, Diseases of Women and Children, 1000; Chemistry and Pharmacy, 100. Examination in Medicine and Surgery in part, practical operation on dead body, approbation of surgical apparatus and examination of medical and surgical patients at bed side. Eligibility of each candidate for Army Medical Service will be determined by result of examination in these subjects:

Examination in following voluntary subjects for which maximum number of marks will be

For French and German (150 each) 300 marks.
For Natural Sciences . . . . . 300 "

Natural Sciences include Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany, with special reference to Materia Medica.

Number of marks gained in both voluntary subjects will be added to total number of marks obtained by those qualified for admission. After passing this examination for admission to Army Medical School at Netley, candidate will be required to attend one entire course of practical instruction on (1) Hygiene; (2) Clinical and Military Medicine; (3) Clinical and Military Surgery; (4) Pathology of Diseases and Injuries incident to Military Service. At the conclusion of this course, candidate required to pass an examination on the subjects taught in the school. If satisfactory evidences of qualification for practical duties of an Army Medical Officer have been given, he will be eligible for a commission as Surgeon. During period of residence at Army Medical School, each candidate will receive an allowance of 5 shillings or $1.25 per diem, with residence, or 7 shillings per diem without quarters, to cover cost of maintenance, and will be required to provide himself with uniform (regulation undress of Surgeon) but without sword.

[Dr. Charles W. Covernton has kindly prepared the above statement in answer to our correspondent. It was unfortunately crowded out of our last month's issue.—Ed.]

MEDICAL DEPARTMENT OF NAVY

much the same as for Army after passing examination at Netley, drafted to Haslar Hospital for a time.

INDIAN MEDICAL SERVICE.

In addition to the requirements mentioned for Army and Navy Certificates of age, moral character and of registration of degrees, diplomas and licenses, candidates will be examined by the Examining Board appointed for the two other branches of service on the subjects previously detailed. Candidates who desire it will be examined in French, German, Hindostani, Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography and Botany.

The Examiners in London will prepare a list in order of merit, with marks affixed on different subjects, to be transmitted to the Professors of Army Medical School at Netley. Candidate has then to attend entire course of practical instruction at Army Medical School before being admitted to his examination for a commission. Allowance per diem at Netley same as for Army and Navy.

AN UNUSUAL STRICTURE OF THE STOMACH.

BY G. A. BINGHAM, M.D.,
Pathologist to Toronto General Hospital.

The following notes of the case I have obtained from Dr. Hillier, of Bowmanville, the attending physician :

Miss L., æt. 48 years, died December 2nd, 1887 ; tall, good figure, complexion blonde, good family history. About the age of puberty, an abscess developed in the region of the stomach, ulcerated through that organ and discharged its contents, which were vomited. After this and during the balance of her life she was troubled with dyspeptic symptoms, acidity, flatus, etc. Previous to coming under my care, some six years ago, she had a profuse hemorrhage which completely prostrated her. Some of her physicians diagnosed cancer of the stomach and fixed the limit of her existence at less than six months. She then removed from Michigan (her home at that time) and came to Canada, and since that time until her death she averaged one attack of hemorrhage each year, which usually came on in the autumn. The attacks came on gradually with soreness in the stomach, loss of appetite and finally vomiting. They lasted from three to six weeks, during which time she would have several attacks of vomiting partially digested blood, which would occasionally pass through the bowels as well. She never complained of any severe pain, the pulse ranged between 110 and 130 ; never any great elevation of temperature. During the attack she could not take food of any kind and was fed altogether per rectum, and fortunately she retained large quantities. Convalescence came on gradually.

During the intervals she was able to digest the ordinary diet of meats, vegetables, etc., and took food in sufficient quantities to keep her system in good condition. She was able to take long walks and do light housework, and suffered very little pain at any time, and between the attacks of hemorrhage enjoyed very good health. The last attack came on early in the summer of 1887 and rendered her very weak. For two months before her death, the quantity of food taken by the mouth was small.

Post-mortem appearance.—With the exception of the stomach, the abdominal and thoracic viscera were normal and the body fairly well nourished ; perhaps the calibre of the intestines was slightly diminished throughout. The walls of the lesser cavity of the peritoneum were adherent, and by this means the stomach was fastened to the pancreas behind and the transverse colon below.

C. Cardiac orifice. P. Pyloric orifice. S. Stricture.

There was a marked stricture of the stomach at the point of adhesion to the pancreas. The finger could with difficulty be passed through the stricture. Measuring along the lesser curvature of the stomach the stricture was situated two inches

from the pyloric and four and a half inches from the cardiac orifice. The pelvic orifice was also constricted to the diameter of the little finger. The walls of that portion of the stomach between the stricture and the pyloric orifice were much thickened, while the cavity between the stricture and cardiac orifice was considerably dilated, the walls thinned and catarrhal-looking on their inner surface.

There was an entire absence of ulceration and the hemorrhages were probably due to a hypercongestion of the cardiac portion of the viscus.

I think it worthy of note that this patient was able, for about 33 years, to digest the ordinary quantity and quality of food, without any marked discomfort, and was thus enabled to maintain a fair degree of health. Judging from the literature of the subject, stricture in this location is a rare lesion.

Correspondence

OUR LONDON LETTER.

(From Our Own Correspondent.)

CLINICAL NOTES.

In cases of acute laryngitis in the adult, Dr. Wolfenden, of the Throat Hospital, prescribes a calomel purge, followed by the same drug in small and frequent doses combined with Dover's powder, at the same time administering the following if the pulse be full: ℞.—Tinct. aconiti, ♏xv; aq., ℥ij. Sig.—A teaspoonful to be given every fifteen minutes for four or six doses, then every half hour for several doses, and finally every hour or two hours; the time between doses being lengthened as soon as the skin appears moist and the heart's action reduced. When the disease has advanced and secretion is being poured out, the following mild expectorant is prescribed: ℞.—Ammon. carb., grs. v; tinct. scillæ, ♏x; tinct. camph. co. ♏xv; syr. zingib., ℥j; infus. serpentar. ad., ℥j. Every four hours. If the cough is very troublesome, ♏ij or ♏iij of liq. morph. hydrochlorat. are added to the above. Locally, he recommends cold compresses of ice or the Lieter coil.

In cases of sub-acute laryngitis he prescribes the following: ℞.—Tinct. benzoin co., ℥iv. Sig.—A teaspoonful in a pint of hot water for each inhalation, night and morning. The patient is cautioned not to go out of doors for at least half an hour after using the inhalation. Trochisi krameriæ are also ordered, each lozenge containing grs. ij or iij of the ext. of rhatany.

In some cases the following vapor is preferred: ℞.—Olei eucalypti, ℥ij; magnes. carb. levis, grs. lx; aq. ad., ℥iij. To be used in the same manner as the above.

In chronic laryngitis, in addition to any constitutional treatment required, he usually prescribes the following vapor: ℞.—Olei. pini. sylvestris, ℥ij; magnes. carb., levis, grs. lx; aq. ad., ℥iij. Sig.—A teaspoonful in a pint of hot water for each inhalation, night and morning, also troch. krameriæ. In tuberculous laryngitis he prescribes a vapor of benzoin and chloroform, as follows: ℞.—Tinct. benzoin co., ℥j; chloroform, ♏iv, in a pint of hot water for each inhalation, and as a local application uses solutions of lactic acid, varying in strength from 20% to 60%, and applied by means of a brush, twice a week. In granular pharyngitis he finds the galvano-cautery the most satisfactory treatment.

In the treatment of those troublesome cases of nasal polypi, which are so apt to recur, Dr. Greville Macdonald, of the same hospital, is markedly successful in obtaining curative results. His method is removal of the polypus by means of Mackenzie's écraseur, which he uses as follows: The meatus being well opened by means of a Thudichum nasal speculum, and the light thrown into the nares, the écraseur is passed in so that the wire-loop is kept close to the septum, until opposite the polypus, when it is turned so as to rest on the floor of the nose. The loop now being under the polypus, it is surrounded by the wire by drawing the instrument upwards and somewhat outwards until the loop is felt to be well up to the base of the peduncle of the polypus. The wire being now tightened the polypus is cut through, and is easily removed by forceps; the point of attachment being subsequently cauterized by means of the galvanuo-cautery.

In all cases of hypertrophy of the middle turbinated bones, he relies upon the galvano-cautery or the application of chromic acid, either of which, with persevering treatment, prove successful. In chronic atrophic catarrh of the oro- and naso-pharynx, he prescribes an alkaline lotion of the

following strength: ℞.—Sod. bicarb, grs. xv; acid carbolic, grs. ij; aq. ad., ℥j. Sig.—A teaspoonful to be added to half a teacupful of warm water, and used by means of posterior nasal syringe, or sniffed up the nose night and morning. The following being also thoroughly applied to the anterior and posterior nares and pharyngeal walls twice a week by means of a brush. ℞.—Iodoform, ℥j; ether, ℥j.

In chronic suppurative catarrh of the ear, where the discharge is slight, the perforation considerable and granulations absent or nearly so, Dr. Macdonald prefers the dry treatment, and considers pulv. acid boracic superior to all other powders. He orders the ear to be thoroughly cleansed by syringing, each time previous to the application of the boracic acid, which is to be blown into the ear through a quill or glass tube. This is repeated once daily at first, and after the discharge is consideraly diminished, every third day will prove sufficient.

CANADIAN.

OUR NEW YORK LETTER.

From our Own Correspondent

NEW YORK, March 20th, 1888.

Dr. Robinson treats epithelioma, where the disease has not progressed far enough to involve the glands, in the following manner, and promises a good result. Make a paste—"Marsden's paste." ℞—Ac. arseniosi; gum acaciæ āā ℥j. Sig. Apply enough to cover diseased tissue by means of rubber adhesive plaster, and leave on for about sixteen hours. Then wash with warm water and apply a simple dressing as ung't. zinc. ox., or vaseline for about a week. If all the pathological tissue be not destroyed, make further applications in the same way.

An interesting discussion on the question of treatment of syphilis in the primary stage, took place at the Academy of Medicine the other evening. Dr. Bronson read a paper advocating the treatment of the initial lesion locally by means of mercury, as soon as it became manifest. His belief was that the disease is at first a local one, and that it extends through the lymphatics and glands in proximity, to the general system. His plan was not to excise the chancre, or attempt to abort the disease by internal medication, but to bring the mercury either by hypodermic injection, or inunction into immediate contact with the syphilitic virus of the chancre, and extending the injections into the lymphatics and glands through which the virus could reach the general system. By this means the syphilitic poison, be it a germ or anything else, is met and combated before it has reached the general constitution. He admitted he had never been able to successfully employ this method, but thought that due to the patients on whom he had tried this treatment, not conforming to his directions. Theoretically, he thought the plan the proper one, and believed it would be practically demonstrated. Dr. R. W. Taylor agreed with Dr. Bronson, that the disease was at first a local one—but the question was as to how much of the surrounding tissue was involved. He did not think syphilis had ever been aborted by cauterization, excision or any local treatment, because it was impossible to reach all of the involved cells; if the chancre were treated locally, large amounts of mercury should be used. He did not believe in the efficacy of the treatment. He said it was unwise to treat the disease before the secondary manifestations, because the disease afterwards acted disorderly, and the patient's mind was always in a state of uncertainty. Mercury acted by causing a fatty degeneration of the syphilitic cells, and hence it was irrational to give mercury, internally at all events, until these syphilitic cells existed; until secondary symptoms appeared. Dr. E. L. Keys thought the disease a general one from the start, with the chancre a local manifestation, and hence. he had no belief in any topical application, or medication with the idea of aborting or curing the disease.

The examinations in the different medical colleges take place much earlier here than in Ontario. Bellevue Hospital Medical College graduated, a few weeks ago, about one hundred and fifty, with only seven candidates rejected. The term spent in college is nominally three sessions, and the majority attend three sessions, but a great many graduate in two years. The University of New York graduated one hundred and fifty-seven. The College of Physicians and Surgeons, which is so heavily endowed by the Vanderbilts, is undoubtedly the best medical college here, and their standard is much higher than that of either of the others. Three years of

nine months each is compulsory, and generally about 25% are "plucked" every year; but still they have much the largest class, the students this year being about eight hundred in number. I think Canada has just reason to be proud of her medical colleges, and of her high standard of medical education.

CANUCK.

Selected Articles.

THE SIGNIFICANCE AND LOCALIZATION OF PAIN IN PELVIC DISEASES.

BY HENRY C. COE, M.D., NEW YORK.

Considering the fact that local pain is the symptom which usually impels a woman to seek the aid of the gynecologist, and that the relief of this pain is the object aimed at in most of his manipulations and operations, it would seem as if our information on this point ought to be more definite than it is. However satisfactory it may be to the surgeon to contemplate a neat and artistic bit of plastic work upon the genito-urinary tract, or to insure a rapid and easy convalescence after laparotomy, if the patient experiences but little mitigation of the pain, to be rid of which she submitted to the operation, in her opinion, at least, it has not proved eminently successful. This may be a narrow view to take of the subject from a scientific standpoint, but it is a practical one. In any branch of medicine the most intelligent patient measures the skill of the physician by his ability to afford prompt relief from present suffering, and it is difficult to convince her that there is any improvement in her condition so long as the pain persists. Pain is the popular indication of existing disease, the seriousness of the latter being proportionate to the severity of the former. This is especially true in pelvic troubles, where the subjective element is so prominent; that patients are constantly at fault in their inferences is a matter of common experience. How often does epithelioma of the cervix make fatal inroads without giving rise to much more pain than does a simple displacement! The inability of the average patient to describe clearly, and to localize, pelvic pain will be apparent on reviewing the vague symptomatology recorded in hospital and dispensary case-books; nor is the connection between the symptoms and the local condition always established by the vaginal examination. The question has often presented itself to my mind: If the true origin of this pain is obscure and ill-defined, how can one hope to remove it by treatment directed more or less at random? It is greatly to be regretted that this subject has not received more attention from neurologists, whose studies would naturally lead them to view it from a loss materialistic standpoint. It certainly furnishes as legitimate a field for their investigation as do diseases of the central nervous system. It is with some trepidation that I bring this subject before the society, because I am conscious of the fact that you must regard with a certain degree of suspicion the off-hand manner in which gynecologists explain nervous symptoms, which you know to be by no means so easy of elucidation. However imperfect this paper may be, I trust that it may at least provoke a discussion which will be of peculiar value, in that it may tend to throw new light upon the obscure subject of pelvic pathology. The matter is naturally considered under two heads, the subjective and objective—the significance of pain as described by the patient, and its localization by the physician. Reflex pains will be discussed separately. It is unnecessary to call attention to the fact that it is a delicate and difficult matter to decide from a woman's own statement concerning the exact character and severity of the pain of which she complains, since there is a common tendency to exaggerate this symptom for which we may not make due allowance until after several interviews. Again, her ability to describe its exact character, site and mode of occurrence, is usually limited. Certain pains, such as back-ache, "bearing down" sensations, etc., are so vague and general that we cannot assign any special importance to them except in connection with more definite pelvic symptoms. Even the pains which are commonly regarded as more or less characteristic of a certain pathological condition are associated with other conditions of a widely different nature. Let us glance at a few of these pains which are sometimes referred to in the text-books as almost pathognomonic, and see if they cannot be reduced to a common basis. The throbbing pain of acute inflammation is excluded as possessing no features peculiar to the region of the pelvis. Among these are constant, aching pain over the lower part of the sacrum, shooting pain in the ovarian region, which is subject to exacerbations just before the menstrual period, and the peculiar "gnawing" pain in the pelvis which accompanies carcinoma uteri. The subject of dysmenorrhœa would be an interesting subject for discussion, especially with the view of determining how much of the pain is of uterine, and how much of ovarian, origin, but to treat it at length would lead us away from the main question.

Chronic pain over the sacrum (as distinguished from the back-ache so common in women) seems to point quite constantly to some morbid condition of the internal generative organs. It is to be carefully distinguished from purely referred pain similarly located, but having more of a neuralgic character, or from that due to direct pressure on

the sacral nerves. This symptom is indicative of some lesion in the posterior half of the pelvis, and it has seemed to me that it is nearly always referable to subacute or chronic inflammation of the perimetric tissues. It is, of course, noted in connection with retro-displacement of the uterus, prolapsed ovaries, and malignant disease; but a careful study of such cases will generally show that it is most constant and severe when these conditions are associated with inflammatory processes in the peritoneum, or connective tissue, or in both. With reference to the latter, "it by no means follows (to quote from Mundé's 'Minor Surgical Gynecology') that the plastic exudation is of great amount, forming an actual tumor." "As a rule," the author adds, "sacralgia increases in proportion to the size and extent of the exudation." This explains why pain in the sacrum is so common in connection with acquired anteflexion, where there is no question of direct pressure on nerves; the cause is to be found in the parametritis posterior which precedes, and leads to, the displacement. It explains, moreover, why adhesion of the retro-flexed uterus is associated with so much more constant and severe pain than is simple retro-displacement, without imprisonment of the organ. We can hardly attribute the pain to direct pressure on the sacral nerves, because the rectum is interposed and Barnes' explanation seems rather forced. This author (Diseases of Women, page 105) says: "The pain is probably not due so much to direct pressure of the body of the uterus, even when enlarged, upon the sacral nerves, as to the indirect pressure occasioned by the accumulation of hardened fæces in the rectum." The rectal symptoms due to the mechanical pressure of the fundus are unmistakable, but they are clearly localized, are not continuous, and are easily distinguishable from the deep-seated aching pain which results from chronic para- and perimetritis. From these brief statements it seems fair to assume that when a patient states that she has a more or less continuous, aching pain referred to the lower part of the sacrum, but seated deeply within the pelvis, we are justified in assuming that it is directly due to a subacute or chronic perimetric inflammatory process in the posterior pelvic fossa, which may, or may not, be associated with a retro-displacement or tumor. In other words, the pain is due principally to the inclusion of sympathetic nerves in the exudates or adhesions, and not to direct pressure on the sacral plexus. This will appear more plausible on studying the effect of such adhesions when situated in the broad ligaments.

In selecting as another fairly typical variety of pelvic pain, that due to malignant disease of the uterus, it may seem as if I had made a serious omission in not mentioning laceration of the cervix. But, it must be evident that not only is the cervix a relatively insensitive region, but that laceration is only one link in a pathological chain, so that by itself it cannot be regarded as giving rise to any distinctive symptoms.

The popular idea is that commencing epithelioma of the cervix is almost invariably accompanied by such pain as that described by Rigby, i. e., "A sudden, sharp, burning dart of neuralgic severity, always proceeding from one spot, and sometimes transfixing the whole pelvis." From what we know of the comparative poverty of the cervical tissue in nerve-filaments, we are forced to question its frequency on anatomical grounds alone; in this we are supported by the clinical evidence. Pain (to quote from Hart and Barbour) "is not present so long as the disease is limited to the cervix; hence, it is of no use as a diagnostic of carcinoma of the cervix in its early stage unless the cellular tissue has been at the same time involved." Hewitt (Diseases of Women, page 127) expresses the same thought when he says: "The pain due to cancer frequently arises from local attacks of peritonitis." In other words, the pain in this case has the same origin as in the former condition, although it is more severe, neuralgic and intermittent. Moreover the patient is more able to localize it, since it is at one time sacral, at another hypogastric, is sometimes described as "a dull, gnawing pain localized in the pelvis or back," sometimes as "a sharp pain, shooting through to the back or down the thighs to the knees." The latter points, of course to direct pressure on the nerve-plexuses by secondary growths.

Carcinoma of the body of the uterus early gives rise to pain, just as does disease of the cervix after it has extended to the body. Sir James Simpson describes it as "slight and intermittent perhaps, at first, but soon reaching a high pitch of intensity, at which it continues for an hour or two, and then gradually subsides." Sarcoma, on the contrary, often occasions remarkably little pain. Can it be because in the case of carcinoma the intra-muscular nerves are more directly affected by the inroads of the disease than occurs in sarcoma of the endometrium? The acute or subacute peritonitis, which invariably attends the progress of carcinoma, readily explains the more severe, continuous and diffuse pains which mark its later stages. Here again, it may be assumed that the pressure of exudates on included nerve-filaments is an important causal factor.

It remains to consider a third common variety of pelvic pain, which is frequently spoken of as "ovarian." It is variously described as "shooting," "darting," "sickening," and is usually located in the left groin or iliac region, is deeply seated, and is frequently associated with referred pains in the sacral and sciatic nerves, and mammary neuralgia, all of which are aggravated at

the commencement of the menstrual period. Pain of a peculiarly sharp, lancinating character in the same region has been ascribed to an accompanying affection of the tube, but it presents no peculiarities that could not be explained by localized peritonitis. Now, as is well known, the ovarian region is the seat of various reflex pains associated with disease of the uterus, of the opposite ovary, or even of the rectum, so that locality alone does not give a positive indication of disease of the gland. The true ovarian pain is probably only clearly defined in the case of the enlarged and prolapsed (but non-adherent) organ during defecation or coitus, when it is directly subject to mechanical pressure. But, when diseased ovaries and tubes are buried in adhesions, the characteristic pain (if there is any) is masked by that due to the adhesions. This is an extremely important practical point, which has only recently received careful attention. It has been shown by Hegar that cicatricial nodules in the broad ligaments may produce nervous symptoms identical with those referred to chronic oöphoritis, even including the exacerbations at the menstrual periods. If this is true, it seems to be a fair inference, as I have repeatedly urged in discussing this subject from a purely gynecological standpoint, that in the majority of the cases in which we assume that pain is of intra-ovarial origin, it is really due to pressure on the nerve fibres, *before* they enter the ovary, and not to pressure on the terminal filaments within the stroma, in consequence of general induration of tissue. If the pain was principally of centric origin it would not only be constant, but it would be unrelieved by electricity or by the separation of peri-oöphoritic adhesions, since the morbid conditions within an ovary would remain unchanged. We shall have occasion to refer to this again under the head of treatment.

I have alluded very briefly to three varieties of direct pelvic pain, which differ not only in their location, but in their character and mode of occurrence, since they seem to illustrate most clearly the point which I wish to make, viz., that when a patient describes a chronic and more or less continuous pain situated over the sacrum, the hypogastrium or the ovarian region, we are safe in inferring that, although there may exist disease or displacement of one or more of the pelvic viscera, the chief causal factor in the accompanying para and perimetritis ; that is, it is due more to pressure upon, or irritation of, the nerves within the pelvic connective tissue and peritoneum, than to irritation of their terminal filaments within the generative organs, or to the mechanical pressure of the latter upon adjacent nerve-trunks.

Having found that the significance of pain as described by the patient is vague and ill-defined, it remains to be seen if we can locate it more exactly by a physical examination. There are several natural obstacles in the way. In the first place only the cervix uteri is directly accessible to the touch, the rest of the genital tract being felt through the interposed vaginal vault and abdominal wall, with other strata of tissue that lie between. Then, it is a matter of common observation that certain regions are peculiarly sensitive to pressure under conditions which, so far as we know, are perfectly normal. Firm pressure in the anterior, posterior, or either lateral fornix frequently gives rise to considerable pain, which in hyperæsthetic subjects may find forcible expression. Whatever may be the anatomical explanation, this pain evidently originates within the pelvic tissue proper, perhaps in the peritoneum. With the exception of the sensation which a patient describes when pressure is made upon an ovary displaced into Douglas's pouch, I can not recall any variety of pelvic pain which can be reproduced, as it were, by the pressure of the examining finger. Thus, by pressure on a retro-uterine exudate we cause pain, but it is referred rather to the point where the pressure is made ; it is not an exaggeration of the diffused aching pain, of which the woman complains. Neither can we be said to reproduce the lancinating pains of malignant disease when we manipulate the cancerous uterus. The cervix itself is, as has been said, comparatively insensitive, and the cases in which direct pressure on the "cicatricial plug" in the angle of a laceration occasions direct and reflex pains are less common than is generally supposed. Exact localization of the pain in this condition is exceedingly difficult, because if the tear has involved the vaginal fornix, the resulting cicatrix in the latter may be quite painful. But, it is the secondary inflammation in the broad ligaments which give rise to the most marked pain, which is often referred to the ovarian regions ; the painful bands, or nodules, when situated at the bases may be located quite distinctly through the lateral fornices. However, there are usually other complications (endometritis, hyperplasia, etc.) which doubtless in themselves cause more or less pain. The practical point is that we may reverse the pathological processes—repair the laceration, cure the endometritis and subinvolution—yet the pains, direct and reflex, persist. In many of these cases it seems as if we could establish a direct connection between their persistence and the persistence of the indurations in the broad ligaments.

The most difficult task is that of trying to establish by the bimanual examinatio the connection between pelvic pain, and obscure, ill-defined masses of exudates high up in the broad ligaments, which can often be mapped out only when the patient is placed under the influence of an anæsthetic, and then any estimation of the amount of pain is out

of the question. The great difficulty is that not only are these masses not directly accessible to the touch, but even when they consist of tubes and ovaries, these are so fused together and buried in adhesions that their original shape is lost, while there can be little hope of developing any characteristic "ovarian" pain by making pressure upon them. Circumscribed indurations in the broad ligaments are often found at autopsies, so situated that they could not have been detected during life, yet these may have given rise to marked nervous symptoms which were referred to an organ to which the indurations were adjacent. Without multiplying examples, it will be evident that a physical examination affords us but little aid in ascertaining the exact site, or origin of pelvic pain.

Before proceeding to make a few practical deductions, a brief reference may be made to some of the so-called reflex pains of pelvic origin. In my opinion gynecologists show a tendency to exaggerate their frequency. I agree with Dr. Dana ("A Clinical Study of Neuralgias, and of the Origin of Reflex or Transferred Pains," reprint, page 24), that vertex pain "is often an indication simply of anæmia,"—for out of twenty-five patients who attend my clinic in an afternoon, probably twenty will confess that they have cephalalgia, which can often be explained without reference to their local condition. I can also subscribe to the statement that "pelvic irritations are felt most frequently in the upper and short branches of the lumbar plexus, next perhaps in the intercostal nerves and upper cervical nerves," etc. Reflex arthralgiæ of pelvic origin I have seldom observed. I was not aware that sciatica was rare in connection with ovarian trouble. Mundé states that "a peculiar pain in the hip, somewhat above the ischiatic notch, is frequently indicative of ovarian disease." But, he adds (rather vaguely) that "a blister over the painful spot may relieve the pain and prove it to be merely sciatica."

Reference has already been made to pains in the lumbo-sacral region, radiating down the thighs, which some writers ascribe to direct pressure on the nerves from exudates or displacements of the uterus. This cause must certainly be rare. It is more probable that such pains are reflex in character. And this leads us to the question of pains referred to, but not originating in, certain regions within the pelvis itself, the significance and localization of which it is extremely difficult to determine. Of these the most complex is irritation in the vicinity of the ovary from disease of the opposite gland, of the rectum, uterus, or even from the presence of small indurations in the adjacent peritoneum. "Ovarian neuralgia" is a loose and convenient term in this connection. It is only necessary to allude to the sympathy which exists between the urinary and genital tracts in order to explain the interchange of pains between them. In fact, after studying the intricate relations of the pelvic sympathetic nerves we can readily imagine the possible combinations which may exist. Moreover, the conditions are too complicated to be explained by reference to Mr. Hilton's beautiful law. In general, it may be said of these reflex pelvic pains that, while there is no doubt as to there frequency, their is much uncertainty as to their origin. We may refer them to some lesion of the cervix, corpus uteri, or ovary, but positive proof is quite as often absent as it is present. In view of the great richness of the nerve-plexuses around the pelvic organs as compared with the terminal filaments in their substance (compare the cervix, the endometrium, and the ovarian stroma), it seems justifiable to refer most of the reflex, as well as the direct pains, to localized inflammatory processes in the parametric tissues, which may, or may not, be capable of detection. In addition to pain referable to coarse lesions, I need only hint at the subject of functional troubles in order to open up a field for discussion which is comparatively fresh.

The practical deduction which I desire to make relates both to prognosis and to treatment, and may be stated briefly as follows: Since we are seldom able to locate the exact site even of the most characteristic pelvic pain, we should be somewhat guarded in our promises to remove it by modification, or removal of, the supposed cause. Thus, we may repair a lacerated cervix, and yet the pains, direct and referred, are not removed, because we did not discover the true cause; or (and this is far more important), we may extirpate an ovary for the relief of pain apparently located in that organ, yet the same sensations persist. Without dwelling upon the latter theme, which has become rather trite, let me in passing quote from one of the most enlightened and conservative of German gynecologists (Winckel op cit.) who, in commenting upon oöphorectomy when performed for the relief of pain alone, says (following Hegar) that the operation should not be performed "when the broad ligaments are contracted and rigid, and when nodules and indurations are found in their structure, because it is possible that these abnormalities, which cannot be removed by the operation, may be the chief cause of the neurosis." Again, he remarks: "According to the law of eccentric projection toward the periphery, the sensation of pain which is felt in the ovary will persist after the latter has been removed, as we so often observe in other nerves, and in other parts of the body."

While desirous of carefully avoiding any criticism of the value of gynecological operations, I would call attention to the fact that many of those performed for the purpose of ameliorating

the symptom *pain*, must continue to be more or less empirical, until we attain such refinement in diagnosis that we are able to refer this pain to a certain definite, circumscribed area in the pelvis. Whether the plan advocated by Dr. Polk (in recent papers read before the New York Obstetrical and the American Gynecological Societies) of separating the adhesions around the displaced uterus and appendages, will prove to be of permanent benefit to the patient as regards the relief of pain, is still doubtful. There is some reason to think that it may be, although the risks involved in the performance of this operation are scarcely less than those attending removal of the ovaries and tubes. But into this question I do not intend to enter here.

There is a therapeutic agent, the value of which is beginning to be appreciated by gynecologists, and which should be especially interesting to you, because you, of all the specialists, are most familiar with it—I mean the use of electricity. I do not refer to its use as an actual local application to diseased organs and tissues, but to its employment for the relief of pelvic pain. That it has a future in this direction will appear from the testimony of prominent gynecologists as to the sedative effect of galvanism in oöphoralgia, and more recently from that of Apostoli, of Paris, in his paper on the use of the "tension faradic" current in cases of pelvic exudation. The application of electricity in the one instance in the case of recognized adhesions of the appendages, and in the other in inflammation of the perimetric tissue, and the benefit obtained in both instances, may be regarded as a practical clinical argument in favor of the theory of the origin of pelvic pain which I have suggested in this paper.

This is not a new theory, of which I have given a mere outline. I am fully aware of the imperfect manner in which it has been presented, and of the fact that I may be open to the criticism of trying to materialize pain, so to speak. But do not gynecologists practically assume to do this when they direct their treatment to a single gross lesion in one of the organs?

The following is a brief resumé of my deductions:

1. That pelvic pain has its origin more often in the perimetric tissues than in any particular organ, being due to irritation of nerve-trunks rather than nerve-endings.

2. That the reflex, or transferred, pains commonly referred to certain lesions in the pelvic organs, may radiate from inflammatory foci in the peritoneum or connective tissues surrounding those organs.

3. That operations upon, or complete removal of, such diseased organs may fail to remove the pain for the reason stated.

4. That this pain, like other nerve pains, may be sensibly relieved by the proper application of electricity.—*Gaillard's Med. Jour.*

THE IMPORTANCE OF LOCAL TREATMENT IN DIPHTHERIA.

It is not needed that mention should be made in this association of the wide prevalence of diphtheria or of the great fatality attending it. Neither would I be thought to assert that local treatment is the most important part in the conduct of this dread disease. Surely it were better to entirely lose sight of local requirements than to be lacking in that care and alertness needed in the successful general medication of each case.

The thought I would present here is that efficient local treatment is always indicated in the early stages of the disease, and often of avail in the more advanced complications. It is to be regretted that the physician is not called sooner in many instances. Often not until the system is profoundly impressed by the diphtheritic virus is he summoned, and then asked to combat, not an incipient fire, but a conflagration rapid in its advance and destructive in its tendency.

First of all, I believe that diphtheria is in its attack a local disease, most prone to invade a mucous membrane denuded of its epithelium. How the specific poison first finds a foothold we know not, but probably a direct contact is quickly followed by growth and absorption. As in the well-known phenomena attending successful vaccination, the systemic infection is quickly followed by increased local disturbance and exudation, most likely at the point of the primary infection. This new development, the false membrane, in its turn becomes a distributing centre for all parts of the system.

If it were possible to antagonize the attack at the beginning, when the diphtheritic impression is first received, the problem of cure would be easily solved. And here let me say parenthetically, that I believe it is good practice to use, frequently and thoroughly, astringent and antiseptic sprays and applications with children who may not show evidence of diphtheria, but who are and have been exposed to it by living in the same house, or are in any known way in the line of invasion. Just as an intact mucous membrane completely covered by epithelial scales may be securely protected from attack, so I hold that, in cases where a denuded membrane offers an invitation for the ready reception of the diphtheritic germ, we may afford an artificial protection, or by proper means destroy an already present foe.

Yet it is not of prophylaxis that this essay is to treat, but of efficient conduct in cases where the disease is present. These conditions exist: 1, a

local specific inflammation; 2, a general septic condition, at first caused by, and afterwards aided by, absorption from this local inflammation.

While many eminent practitioners depend upon general medication, and some have quite abandoned all forms of local treatment, it is evident that all indications are not met unless attention is given to the local manifestation of diphtheria. If the disease is of local origin, if the systemic infection is constantly receiving fresh re-enforcement by means of the ready absorption of the specific poison—aid the system by all means to throw off the incubus of infection, but also limit if possible the further supply.

How shall this best be done? This depends upon the amount of local progress. I do not hesitate to say that I have seen a local diphtheritic exudation melt away in three or four days under proper local applications, the system being at the same time well guarded. But were these true cases of diphtheria? This much in affirmation: Several of these of which I speak were in families where one child had just died from diphtheria, where the symptoms were all indicative of diphtheria, and where there had been every opportunity for infection.

An old cry is that a physician who professes to conduct his cases of diphtheria to a favorable termination is an alarmist, and his cases are simply follicular amygdalitis. Such a pitiable antagonism is unworthy a scientist. Mistakes do occur, and it is better they should be on the safe side; but I am willing to call a case diphtheria where I find that the child, having been exposed to the contagium, has anywhere upon the mucous membrane of the upper passages a thick, continuous yellow exudation, closely adherent to the mucous membrane, with a tendency to necrosis and sloughing, especially if the pulse is quick and weak and the temperature above normal. It is possible that such a case is not diphtheritic, but it is not probable, and we deal with probabilities. The differences in local appearance and general condition between a follicular exudation and the characteristic false membrane of diphtheria are usually so marked that the physician need not be mistaken, and if he does err, let him give the child the benefit of the doubt.

Beyond this class we have another or advanced degree of the same class in which there can be no doubt as to the type of disease. We find it when called two or three days after the first attack. No longer is there now a small patch confined to the tonsil, or to a small part of the pharyngeal wall or soft palate. The natural guardians of the child have slept and the insidious enemy is in full possession. A dense dirty-yellow and sometimes disintregating exudation is found closely attached to the natural tissues in some places, and in others hanging in loose shreds, while the naso-pharynx is filled with detached portions of membrane, retained mucus, and sometimes blood, and poison from this septic hot-bed is being rapidly absorbed and carried to the most remote parts of the little frame. Each of these classes of cases demands special and distinct local management.

Let us consider the first class, where the membrane is yet small in extent and of recent formation. Can we close the portals of the absorbents and render the existing local focus of disease inert? After experimenting with many formulæ, I have for several years renewed my confidence in the mixture of equal parts of glycerin and tincture of chloride of iron. The most fashionable and really excellent practice of using bichloride of mercury provides for antisepsis, but not for the equally important matter of astringency. But little manipulation is needed in these early cases. A cotton-covered probe is by far the best instrument, and with it the solution is not merely brushed over, but pressed against, the point of attack There is no necessity of hurting the child if care is taken, but, on the other hand, I retain a vivid picture of the good old doctor, conscientiously bound to do something, his spectacles awry, plunging a "swab" at random down the throat of a kicking child, or through the clinched teeth, scraping the mucous membrane from the roof of the mouth by the good help of the ubiquitous tablespoon. By proper tact the application may be made easily, and, if it is repeated frequently—*i. e.*, every two hours—its efficiency will soon be demonstrated.

In the more advanced class of cases much more than this is needed. The extent of false membrane is greater, it is more difficult to reach, and the upper respiratory passages are obstructed. First, all of the detached membrane and *débris* should be removed by the syringe, and there is no better method of doing this than that described by Dr. Jacobi in the discussion following Dr. Billington's able paper on "Local Treatment in Diphtheria" (*Medical Record*, April 9, 1887). A tepid but weak solution of common salt is an effective cleansing agent, after which a spray of bichloride-of-mercury solution can be used. The spray should be used warm, and to protect the nostril I often pass over the end of the spray-tubes a small piece of rubber-tubing and roll it up, so as to fit the nostril fairly well. There is no use in attempting to employ the more direct and potent applications by means of the probe in these cases. Many other agents have been used by spray and inhalation or insufflation, such as carbolic acid, lime-water, weak solutions of iron, etc. These are useful, but time forbids speaking of all.

When there is great irritation from laryngeal involvement—if the exudation is not too great—the vapor from slaking lime often gives relief.

I should greatly exceed my limit of time did I attempt to discuss the relative value of tracheotomy and intubation. The opportunity is given, however, to call attention again to what I believe to be an important addition to the ordinary procedure in tracheotomy—*i. e.*, to fill the larynx above the artificial opening with a pledget of cotton or small sponge saturated with an antiseptic solution, to prevent, if possible, the extent of the local disease by continuity of surface.

Let me repeat these thoughts: 1. Diphtheria is in its incipiency a local disease. 2. Local treatment is important, an aid to, but never a substitute for, the careful general medication and cure. 3. The exact means used in local treatment may not be important, but the end to be accomplished is the speedy sterilizing and disintregation of the diphtheritic exudation, without injury to the adjacent tissues. 4. The local treatment must be conducted promptly, persistently, and carefully.—Dr. Porter, in N. Y. *Med. Jour.*

ABDOMINAL SECTION FOR DISEASE OF THE UTERINE APPENDAGES.

Dr. Charles B. Penrose read a paper on this subject, founded on eleven cases, all successful. The operations had all been performed in 1887, and the patients were at present well and able to attend their various duties.

In five of the cases the appendages were removed on only one side. In one of these (a case of pyosalpinx and cystic ovaries) the author had found it impossible to remove the left tube and ovary. They were firmly adherent in a knot on the side of the uterus, and the uterus was bound down in the hollow of the sacrum. In the other cases of unilateral removal he had intentionally left the appendages upon one side. Except in the case of dermoid cyst, the women were young and desirous of having children; and at the time of operation he could discover no sign of any pathological condition in either the tube or ovary. He was aware of the fact that in cases of tubal disease it was often unwise to perform a unilateral operation and to leave even an apparently healthy tube, as, in many cases, it subsequently became diseased from an infecting focus in the uterus.

Though sufficient length of time has not yet elapsed to come to any definite conclusion with regard to his cases, yet so far he had had no cause to regret having left the sound tubes; and in one case the patient had become pregnant since the operation.

A point of interest in connection with the first case (salpingitis and cirrhotic ovaries) was the length of time during which the patient was fed by the rectum. She began to vomit as she recovered from the influence of the ether, and she continued to vomit everything which was administered by the mouth for thirty-six days after the operation. There was no apparent cause for this excessive vomiting. The operation was simple, and was not followed by any obvious symptoms of peritonitis. The rectal injections, by means of which this woman was nourished for over a month, consisted of pancreatized milk, eggs, and whiskey. Two-thirds of a quart of milk, one egg, and three ounces of whiskey were administered in four or five doses during the twenty-four hours. During this prolonged course of rectal feeding she lost many pounds in weight. No food at all was taken by the mouth; the very small quantities which were occasionally administered experimentally, were always rejected immediately. When she finally became able to take food by the mouth it was necessary to give it in the form of twenty-drop doses of soup or beef tea. In the table he had made no distinction among the different forms of non-purulent inflammation of the Fallopian tubes. All thickened, enlarged, adherent tubes which did not contain pus he had put down as cases of salpingitis.

In all the cases of pyosalpinx there was a history of repeated attacks of pelvic pain and inflammation, which often confined the patient to bed for several weeks. In two of the cases of pyosalpinx there was also ovarian abscess. In these cases the abscess cavity in the tube communicated directly with the abscess cavity in the ovary, and the origin of the ovarian abscess was obvious. In case VII (salpingitis and abscess of the ovary), however, there was no pus in the tube. The tube was enlarged and adherent, and its fimbriated extremity was closed; and it did not communicate with the cavity of the ovarian abscess. The ovarian abscess contained about half an ounce of pus and had a distinct pyogenic membrane. The author thought that abscess of the ovary was of more frequent occurrence than works upon gynecology admitted And, though it probably was in general due to oöphoritis caused by inflammation of the tube, yet it was not always associated with pyosalpinx. In two cases of double pyosalpinx (cases V and IX) a thin purulent fluid was found in the peritoneal cavity, and the intestines were found to be deeply congested when the abdomen was opened. The patients had probably been suffering for some time with general chronic peritonitis, the patients having only complained of pelvic pain and pain in the back. The chance that such a condition might occur in connection with pyosalpinx was a strong argument in favor of removing these abscesses by abdominal section, instead of evacuating them by the vagina, as was so often done.

The danger of assuming any case of peritonitis in a woman to be idiopathic, without a thorough vaginal examination, was obvious. He had the

report of a case which had occurred recently, where the patient was treated for several weeks for idiopathic peritonitis, and an operation done a few hours before death revealed double pyosalpinx and a ruptured ovarian abscess.

In six of the cases reported, an abdominal drainage-tube was used. The average time of convalescence in these cases was no longer than in the cases where a tube was not introduced; and the severity of the symptoms following the operation —the elevation of temperature, the rapidity of pulse, and the pain—were much less marked in the drainage-tube cases than in the others. The absence of pain in the drainage-tube cases was probably in part due to the fact that most of them were cases of pyosalpinx, where the tissues which were ligated and cut were so far degenerated that their sensibility was much diminished. He thought that the danger of abdominal hernia following the use of a drainage-tube had been exaggerated. In one of his cases there was now a small hernia, but it had occurred above the position of the tube and was probably due to some error in introducing the sutures. In some thirty drainage-tube cases which he had seen in the practice of Dr. Joseph Price, there had, as yet, been no hernia. It was probable that hernia was due more frequently to a long or a high incision and careless suturing than to a drainage-tube. The average length of time before the glass drainage-tube was removed in his cases had been about five days, the shortest two days and the longest eight days. In but one case had the discharge from the tube become purulent. The use of a cotton rope to act as a capillary drain added greatly to the value of the glass drainage-tube. It prevented any fluid from remaining in the bottom of the tube, and it removed the deposits of fibrin from the perforations in the glass.

One case was reported at length on account of the interesting phenomena attending the development and the subsidence of the peritonitis, and because it was treated throughout by sulphate of magnesium and rectal injections, and not by opium. And, indeed, he had not found it necessary to use opium in any of the cases reported.—*N. Y. Med. Jour.*

THE RADICAL CURE OF HERNIA.

The change which has taken place in modern surgery as a result of the introduction of antiseptic methods, is nowhere better seen than in the rapidly increasing frequency of operations for the radical cure of hernia and their great apparent success. At the annual meeting of the British Medical Association, held last year in Dublin, a series of interesting papers was read, which have only recently been published in full. (*Brit. Med. Jour.*)

The most important points to be noted are: (*a*) The treatment of the sac. (*b*) The treatment of the rings and edges of the canal. (*c*) The after-treatment as to the employment of pressure by truss or otherwise. Many details which cannot be considered as unimportant must be omitted from a brief summary, and should be studied in the original papers, which were remarkably concise and practical. Strict antiseptic methods were employed in every case.

Dr. Macewen carefully separates the sac from the entire inguinal canal and from the abdominal aspect of the internal ring; fastens a stitch in the fundus, throws the whole sac into a series of folds, transfixing them with the same stitch carried through one after the other up to the ring, threads the free end of the stitch in an eyed needle, and passes it through the abdominal wall an inch above the upper border of the internal ring, the skin at that point being pulled up so that it is not included. While traction is made on that thread, pulling the sac into the ring, so that its distal extremity is furthest backward and upward, the conjoined tendon is pierced by a ligature, so as to leave a loop inside; the lower end of that stitch is then carried through Poupart's ligament from within outward, the upper end through the transversalis, internal and external oblique muscles. Similar stitches may be introduced lower if necessary. The free end of the ligature through the sac is then fastened by passing it several times through the external oblique muscle, and the other stitches are tied, closing the internal ring. Chromicized catgut is used for these sutures, and to unite the skin. A decalcified bone drainage tube is laid in the lower angle of the wound. No truss is used. He states that the principle of the operation may be applied to femoral hernias, but gives no details.

Mr. Banks dissects out the sac, opens it, replaces bowel, ties and cuts away adherent omentum, pulls the sac well down, ligatures it as high in the canal as possible, and removes it. Finally, the pillars of the ring are brought together by two or three silver sutures, which are left in position. In femoral hernia the cleaning and removing of the sac constitute the whole operation. In ventral and umbilical hernia the sac is used as a plug to stop the aperture. He considers "freshening" the edges of the canal with the idea of securing union, to be "utter nonsense." He encourages his patients to wear light trusses afterward.

Mr. Ball isolates the sac completely, twists it on itself four or five times, and transfixes it with two sutures, passed first through one pillar of the ring, then through the sac, and then through the opposite pillar, after this the sac is excised, and the sutures tied over leaden plates. He objects to the subsequent use of a truss.

Mr. Stokes dissects the sac from the elements of

the cord, divides it between two catgut ligatures, twists the proximal portion until distinct resistance is felt, and transfixesit with two silk sutures passing through both pillars and walls of the canal. These are brought through she skin an inch from the incision on either side, and tied "button fashion," over a leaden plate. He thinks the sutures serve a merely temporary purpose, and should be introduced loosely, and objects strongly to the permanent metal sutures. He is convinced that the after application of the lightest truss, fitted with a pad, is hurtful, and uses a linen dressing known in Dublin as "Harrison's truss."

Mr. Barker clears the neck of the sac close to the external ring, surrounds it with a silk ligature, opens it longitudinally, to to see that it is free from gut or omentum, ties it tightly, leaving long ends to the ligature, and cuts it away, allowing the lower portion to take care of itself. One of the ligature ends is then threaded in a needle, which is carried up the inguinal canal, forced through one border of the in ernal ring, and out through the external oblique muscle, the other end is put through the opposite border, when the two are tied, drawing the stump of the sac into the internal ring and closing it. The walls of the canal are then closed by four to seven ligatures; the ends are cut short. The skin wound is then stitched. No drainage is used. The use of trusses is avoided.

Mr. Franks closes the internal ring with silver sutures, two or three in number, transfixing the sac and excising it below them; he also closes the external ring. He leaves the sutures *in situ*, and believes their retention "materially fortifies the parts." He thinks a truss rarely necessary, and uses a cotton wool pad held in place by a bandage.

Mr. Mayo Robson ligatures and excises the sac and draws the pillars together with silver sutures.

Other gentlemen reported cases, and Mr. Puzey called attention to the need of prolonged rest after these operations. The aggregate number of cases operated upon, including those in which strangulation was present, was about 450; the deaths from the operation were very few; but the total percentage on the whole number of operations cannot be calculated, as exact figures were not given in each case. The mortality was, however, beyond donbt very trifling, as taking, for example, the cases of Macewen, Barker, Ball, and Franks, we have an aggregate of 168 cases without a single death. Only 10 deaths are mentioned out of the whole number, and of these 2 were from bronchitis.—*Am. Jour., Med. Sciences.*

All women are kleptomanic to a certain extent; they will hook dresses.

ON THE USE OF STRYCHNINE AS A HYPNOTIC.

Quiet sleep usually comes readily and quickly to any healthy person who is tired, but not overtired, with bodily or mental work. But as too many know, there is a condition of excessive fatigue, either bodily or mental, and more especially of that fatigue which follows intense mental strain or worry, which prevents the unhappy sufferer from obtaining the rest and refreshment by sleep of which he stands so greatly in need. The treatment of such cases is very difficult. The use of opium or other narcotics is objectionable, not only because it may tend to induce that dreadful condition, the opium habit, but because it frequently happens that the sufferer from sleeplessness is obliged to have all his faculties clear and all his wits about him in order to get through his daily work. The administration of opiates at night tends in many people to produce a certain amount of dulness through the day, which would render the use of these drugs inadmissible, even if there were no other objection to their use.

Chloral is not so objectionable on this account, as it may induce sleep without in the least obscuring the mental faculties next day, but the use of chloral also is objectionable both because of the tendency to the formation of a chloral habit, and because its long continued use may have a weakening action on the heart and also a deleterious action on the brain. I have seen at least one case in which the continued use of chloral appeared to induce mania, which began to improve as soon as the patient was removed to an asylum and cut off from the use of the drug.

Bromide of potassium is probably the least objectionable of all, but in many cases of overwork it seems to lose entirely, or almost entirely, its hypnotic action.

In treating some cases of persons engaged in literary work who were suffering from sleeplessness and yet were obliged to have their brains perfectly clear during the day, it occurred to me that if I could convert the condition of over-tiredness into a condition of simple tiredness, the patient would naturally fall sound asleep without the use of any hypnotic. One can sometimes do this to a certain extent by giving some warm beef-tea or a tea-spoonful of Valentine's meat juce in water either hot or cold, or by giving a little alcoholic stimulant, such as whiskey and water or brandy and water. It is probable that these substances have a double action, tending to dilate the vessels of the stomach and withdrawing blood from the head, as well as tending to exert what we may vaguely term a stimulant action on the nervous tissues themselves, without understanding what the exact nature of this stimulant action is. It occurred to me that as strychnine is one of the

most powerful stimulants, if not the most powerful nervous stimulant that we possess, a small dose of it might have the effect of bringing the depressed nervous system up from the condition of over-fatigue to that of simple fatigue, and thus inducing sleep. I accordingly tried it, and was much pleased with the result. It acted exactly in the manner that I expected, and induced comfortable healthy sleep without any disagreeable effects next day. The way in which I have used it has generally been either in the form of the tincture of nux vomica in doses of 5 to 10 minims or in the form of Schieffelin's granules, containing $\frac{1}{100}$ of a grain of sulphate of strychnine in each. One, two, or more of these granules were given at bedtime, and the dose was repeated if the patient happened to wake within one or two hours afterwards.

I think it is very doubtful indeed whether strychnine would answer in other cases of sleeplessness than those arising from overwork or worry, and more especially from overwork. I have tried it however in a case of sleeplessness occurring in anemia, but as the patient at her next visit complained that the medicine made her sleep rather too heavily, I am not quite sure how mere suggestion may have played a part in effecting the result, nor have I been able as yet completely to eliminate this factor in other cases. The results which strychnine has yielded in my hands being so good, and the condition for which I have used it being so distressing, I have thought it worth while to mention its use as a means of affording sleep in order that others may try it as well as myself, and may, I hope, obtain from it equally good results; although it only too frequently happens that a drug seems to prove very much more effective in the hands of the man who first employs it than of those who try it afterwards.—*T. Lauder Burton, M.D., F.R.S., in The Practitioner.*

SOME USES OF CANNABIS INDICA.—It is in certain conditions in which apparently the use of cannabis is not so well known or widely employed in this country that the writer invites attention.

One of these conditions is anorexia—loss of appetite consequent upon exhausting diseases, such as prolonged fevers, diarrhœa, dysentery, phthisis, etc. This, a very common circumstance in India, causes at times much anxiety to the physician. The stomach suffers from the same debility as the other organs of the body, and there is a repugnance to and intolerance of food in almost every form, which does not always yield to acids, bitters, and nux vomica as usually prescribed. In such cases cannabis indica in small doses (♏ v.-x. of the tincture or gr. $\frac{1}{4}$-$\frac{1}{2}$) of the extract have been found very useful. The former preparation may be ordered in mixture (emulsion), with a small quantity of mucilage and simple syrup, and flavored with rose-water; the latter as a lozenge or *bonbon*,—the extract being rubbed up with white sugar, gum acacia, etc., to suitable consistency. Such a mixture or lozenge given three times a day, half an hour before meals, will frequently, in two or three days, bring back appetite for food and promote its digestion. I need hardly say that both these preparations are very palatable and readily taken by even fastidious patients.

It is well known that consumers of the drug in India, have, as a rule, voracious appetites,—a fact or indication which appears to have been lost sight of in practical therapeutics.

Another condition is dyspeptic diarrhœa and the diarrhœa which is associated more frequently in the tropics than here, with defective action of the liver and deficient secretion of bile, and which constitutes the earliest and most prominent symtom of that obstinate and specific disease the diarrhœa alba of the tropics (hill or tropical diarrhœa). Speaking more particularly of the latter affection, a characteristic feature is the tendency to action of the bowels soon after meals, and the consequent hurrying of the imperfectly digested food through the intestines, accompanied by remarkable and active vermicular movements of the latter, with much flatulency, borborygmi, etc.

In the earlier stages of this disease cannabis often proves of great service in controlling the diarrhœa. But even in more advanced cases of tropical diarrhœa cannabis will sometimes prove very useful. I have most usually prescribed it in the form of mixture, beginning with ♏ x. of the tincture and gradually increasing the dose to ♏ xv., xx., or even xxx., three times a day or oftener. A suitable combination is the following:

℞.—Tincturæ cannabis indicæ, . . . ♏x.-xx.
Bismuthi subnitratis, ... grs. x.
Mucilaginis acaciæ, ... ʒss.
Spirit. chloroformi co., ... ♏xx.
Aq. cinnamomi *vel* aq. menth. pip., ʒj.
Misce.

This mixture may be given before or after food, preferably the latter, and more particularly when the dose of the tincture is increased. By exhibition soon after food the liability to unpleasant symptoms (headache, giddiness, hallucinations, etc.) is greatly reduced, even in persons who are very susceptible to these effects of the drug.

In both true tropical diarrhœa and the more simple dyspeptic diarrhœa cannabis has this distinct advantage,—that it in no way interferes with the bile-forming functions of the liver, as opium undoubtedly does; and yet the latter drug, though so valuable in other forms of looseness of the bowels, is apt to be incautiously used, and to my knowledge has been thus used with disastrous results, the proper nature of the above affections and their primary dependence upon altered hepatic function not being rightly comprehended.

The third and last condition in which Indian hemp has been found useful by me is in cases of chronic cardiac disease and in chronic Bright's disease as an hypnotic.

In cases where there is distressful sleeplessness and general inquietude, rendering the sufferer's condition most miserable, where the heart is enfeebled as well as over-taxed and chloral seems inadmissible, or, on account of the engorged state of the lungs or of the defective action of the kidneys, opium must be avoided,—in such cases the administration at bedtime of ℥l xv.-xx. of the tincture of cannabis indica, combined with a small dose of chloral (grs. x.) and ʒss of bromide of potassium, will often act magically in giving not only sound and refreshing sleep for several hours, but also in greatly alleviating the general disquietude and distress of the patient; and that this effect is to be attributed to the combination of chloral and potassium bromide (as might by some be supposed), I have assured myself of by check experiments, both on the same and on different patients, on many occasions.—*Practitioner.*

Sir Morell Mackenzie.—Three generations ago a Rossshire Highlander put a shilling about some part of his person and set his face across the Scottish border. His name was Mackenzie; he amassed a good fortune, and his grandson grew into a mad doctor of much ability but of retiring habits. To this physician, then living at Leytonstone, England, there was born fifty years ago a son who was named Morell, after an uncle who perished very creditably in the loss of the Pegasus. Young Morell was left to run wild in Epping Forest to an advanced boyhood, but he progressed well later; took a high degree at the University of London; abjured the retiring habits of his father; screwed a brass plate on his door; and took to looking down people's throats for guineas. His success in private was great and immediate, and a few years after setting up he could give to physicians who had been established a life-time a score of patients and a beating. He became a specialist. He wrote books on "Diseases of the Throat and Nose," and on the "Hygiene of the Vocal Organs." He founded the Hospital for Diseases of the Throat, in Golden Square, obtained all the professional honors in general which throat and nose can give, and became the special champion of specialism in medicine as opposed to general routine; in which capacity he largely developed and amply displayed the bellicose and controversial predisposition he had inherited from the original Highlander. A few months ago he was called in to deal with the throat of the Crown Prince of Germany, which had baffled all the German doctors; and this he has treated with such success that it has been made the occasion for conferring upon him the distinction of a knighthood. Sir Morell is a man of wealth, of capacity and of strong individuality. He has long been the physician and friend of all singers and actors, and he has a son who is already making a name as a comedian. He can often see a joke, which is unusual for a Scotchman.—*Vanity Fair.*

The Green Diarrhœa of Children.—Another alleged triumph of the microbe is brought to light through the researches of M. Hayem and his assistant, Lesage, who affirm that this industrious creature is the cause of the green stools of children. These investigators assert that for the first twenty to twenty-five days after birth, diarrhœa occurring in children is apt to be bilious in nature, but such a form of diarrhœa becomes more and more rare up to the age of six months. After this time, if the discharges are examined in cases of green diarrhœa, an innumerable number of pathogenic bacilli will be found, to such an extent that to their presence is due the peculiar mucous character of these stools; while the coloration is due not to the bile-pigments, which are entirely absent, but to a peculiar pigment secreted by the bacilli themselves, and which may be reproduced in artificial cultivations of the microbes. It would, therefore, seem clear that because the passages in a case of diarrhœa are green it is not warrantable to speak of them as bilious, since in many cases bile-pigments will be entirely wanting in cases of green diarrhœa. Further than this, it would seem that this form of specific diarrhœa is contagious, and may be produced in different animals by the induction of the bacilli through various means. While it is claimed, however, that there is a certain amount of probability in the contagion of the disease, of course it does not imply that dyspeptic troubles are without influence on the development of this form of diarrhœa, since it is readily conceivable that indigestion, by preparing the soil, may favor the production of this bacillus. Hayem and Lesage have found the greatest success in the treatment of this form of diarrhœa by the administration of a two per cent. solution of lactic acid in teaspoonful doses. Of course, in this form, as in other forms of diarrhœa, the diet must be regulated. Care must be taken to employ disinfection of the stools to prevent the spread of the affection, and by proper care it is claimed by these means the mortality of this microbic form of diarrhœa may be reduced to a minimum.—*Therap. Gazette.*

Treatment of Syphilis.—In a late issue of the *Bulletin Gén. de Thérap.* is a useful paper on the treatment of syphilis, by Prof. Verneuil. As a representative of the more conservative of French surgeons, Verneuil speaks with authority on such topics. The conclusions at which he arrives

harmonize with the opinions most generally held. He maintains the superiority of mercury. As respects the diagnostic value of the two agents—iodides and mercury—he never decides the question of specific lesion or not, except from the results of a trial of mercury. In three examples of old syphiloma of the testicle—cited for illustration—the iodide of potassium in massive doses failed to disperse the tumor, but mercurial treatment effected a cure in a few weeks, thus demonstrating the nature of the neoplasm.

Professor Verneuil does not advocate the huge doses of iodide of potassium now in vogue—30 to 45 grains per day being his maximum—except in cases of rapidly destructive ulcerations of the nares, veil of the palate, and similar lesions, and even then in quantity not exceeding 75 or 96 grains *per diem*. He has never favored the conjoint administration of mercury and iodides. He prefers to give mercury by itself, and associated with remedies to improve the general state of the patient. He has occasionally made use of the combination of these remedies in slowly developing secondary or tertiary accidents when mercury does not act well, or has not been given at all. Under such circumstances he prescribes in the simplest way $\frac{3}{4}$ grain of protoiodide of mercury and 15.5 grains of potassium iodide.

Mercurial frictions, although in some cases acting energetically, do not commend themselves to his jndgment. When he has employed inunction, he has not dispensed with the internal administration of the protoiodide or some other mercurial, in small doses. Nor has he practised the method of subcutaneous injection of mercurials, which often cures, apparently, in twenty to thirty days. He holds that the most certain curative results are obtained by the slow saturation of the organism as effected by the stomachal administration rather than by sudden impression.

For the local treatment of syphilitic ulcerations, mucous patches, etc., the early manifestations of the constitutional state, he employs nitrate of silver, or chloral solutions, topically, in conjunction with the use of mercury internally. —*Am. Jour. Med. Sci.*

THE TREATMENT OF EXOPHTHALMIC GOITRE.—Dr. R. Vigourour (*Le Progrès Med.*) lays great stress upon the kind and method of application of electricity in the treatment of this affection. He employs faradization in the following manner: (1) A large electrode from 7 to 8 ctm, in diameter is is applied to the inferior part of the neck posteriorly, and is held in position by the means of a band. The other electrode is olive-shaped or button-shaped, less than 1 ctm. ($\frac{1}{3}$ in.) in diameter, and is connected with the negative pole of the battery. This electrode is applied behind the angle of the jaw, in front of the sterno-mastoid muscle, and is made to press upon the carotid artery. The application is made during a minute and a half, and is then transferred to the opposite side, where it is continued for the same length of time. (2) The small electrode is then passed lightly over both orbiclares palpebrarum in turn. (3) The olive elcetrode is now replaced by a plate 4 ctm. ($1\frac{3}{4}$ in.) in diameter, and is applied to the thyreoid tumor. (4) The small electrode is now rendered positive, and is applied to the precordial reigon, in the third intercostal space, to the left of the sternum, and and the current should be sufficently strong just to excite fibrillar contractions. The application is made for to or three minutes. The seances are repeated every second day. There is no advantage in repeating them daily. The ill success of the of this affection by some, the author thinks, is due to want of attention to the foregoing details. In most cases it was the only treatment he employed, and his results were exceedingly good. Hydrotherapeutics is unnecessary with this form of treatment.—*N. Y. Med. Jour.*

THE THERAPEUTIC VALUE OF BORACIC ACID.—Recently much has been written concerning the value of boracic acid in leucorrhœa and in gonorrhœa of the male and female.

The merits of this agent have been long recognized in ophthalmological practice, and it has been lauded greatly in the treatment of inflammations of the lining membrane of the bladder.

As an antiseptic. its claims are established. It is said to possess no value as a germicide.

A three per cent. solution is the one usually prescribed in all departments. In weaker solutions than this its antiseptic effect is said to be not so marked. Its use in the treatment of nasal catarrh is also worthy of mention. We have prescribed it in this condition in the strength of a teaspoonful of the powdered acid to a pint of warm water. Three or four tablespoonfuls of this are to be poured into each nostril two or three times a day. We often prescribe it in this condition also in the following combination:

℞ —Cocaine hydrochlor, ... gr. ij.
Acidi boraci, ... gr. xv.
Listerine, ... ℥j.
Aquæ destill, ... ℥j.

M. D. Sig —Use as a spray for the nose morning and night.—*Gaillard's Med. Jour.*

ON REVACCINATION.—Dr. G. Somma is an enthusiastic partisan of vaccination and recommends energetically the introduction compulsory revaccination in this country. Taking into account the whole foreign and Italian literature on the subject, he formulates his view in the following sentences.

1. The protective effect of vaccina against small-pox is indubitable. 2. This effect is limited

in time, and vanishes after ten or twelve years. 3. Revaccination, therefore, is indispensable, for those successfully vaccinted in childhood, as well for those who have passed through variola and variolaids. 4. Revaccination almost perfectly protects the body from an attack of small-pox. 5. Its necessity is founded on scientific and experimental facts. 6. The age of adolescence offers the best opportunity for effective vaccination. 7. It is to be performed with animal lymph exclusively. Vaccination and revaccination are the only means to put an end to continuously returning small-pox epidemics.—*Am. Med. Dig.*

TYPHOID BACILLI AND BOILING WATER.—In order to test the destructive power of boiling water on typhoid bacilli, Dr. Vilchur, of St. Petersburg, made a number of pure cultures in broth, keeping them in a thermostat for two days at a temperature of about 92° F., and then mixed them with known proportions of boiling water, immediately afterward sowing the mixtures in jelly. The results showed that, when the volume of boiling water equalled that of the culture, the bacilli were partially but not wholly destroyed. When double the volume of boiling water was used, the bacilli were all killed. From experiments with typhoid stools, he found that all the bacilli, however numerous, were invariably destroyed by the addition of a volume of boiling water equal to four times that of the stool. In this way he suggests it will be easy to disinfect with certainty all the dejections of typhoid patients.—*Lancet*, January 14, 1888.

THE TREATMENT OF URÆMIA.— Lancereaux prescribes, to favor the secretion of urine :

Pulv. scillæ,
Pulv. scammon.,
Pulv. digital., ... āā gr. ¾.

In one pill.

From four to six may be taken daily, for from five to six days.

Roland prefers the following combination, which acts on all the emunctories :

Ext. jaborandi (alcohol.),
Ext. scillæ,
Resin. jalap.,
Resin. scammon., . . āā grs. ¾.

In one pill.

Four or five pills may be taken daily, for several days. If preferred, nitrate of pilocarpine may be substituted for jaborandi, in doses of from 1-35th to 1-15 of a grain.—*Rev. de Clin. et de Thérap.*

WHY SOME DOCTORS FAIL—

They are too lazy.
They are easily discouraged.
They do not try to improve.
They fail to know what the world is doing.
They have too much outside business.
They talk politics too much.
They fail to have new ideas.
They are not polite enough.
They think most things take too much trouble.
They read no professional papers or books.
They are trying to go into something else.
They follow the same method with each patient.
They attend no professional meetings.
They complain too much.
They fail to practice what the professional papers tell them.
They do not determine to be the best doctors in the place,
They do not seek information by studying the methods of the best teachers.—*Lansing Republican.*

THE ETIOLOGY AND PERIOD OF INCUBATION OF CROUPOUS PNEUMONIA.—R. Caspar (*Berlin klin. Woch.*) has carefully studied two hundred and four cases of croupous pneumonia which have come under his care within the past five years, with the view of determining the etiological factors and the period of incubation of this disease. He believes it is infectious, and some cases which he observed favor this belief very much.

One of the most striking instances was where a son from another village came to visit his father, who was lying ill with pneumonia. The son remained only part of the day and then returned to his village, which was entirely free from cases of pneumonia. Four days afterward he was taken ill with an attack of that affection. A number of other cases that the author observed made him draw the inference that the period of incubation was four days. He could not observe any meteorological conditions to explain the outbreak of the epidemics, nor during an epidemic did he notice that different conditions of the barometer had any influence upon the spread of the disease. His cases occurred also mostly during the first four months in the year. He does not consider, as some observers do, that pneumonia is secondary to bronchitis. He concludes his article as follows : 1. Fibrinous pneumonia is an infectious disease. 2. It is contagious. 3. Its period of incubation is four days. 4. Low temperature, slight absolute humidity, and strong winds seem to favor its spread.—*N. Y. Med Jour.*

A SIMPLE METHOD OF DISLODGING IMPACTED GALL-STONES.—Lawson Tait describes the following simple procedure, which he has used in one case sucessfully. It consists in passing a fine needle through the wall of the intestine from below (that is from the empty part of the intestine) into the gall-stone. The stone is thus easily and immediately split up into fragments and passes readily along the intestine, and the grave com-

plication of opening the intestine is rendered unnecessary. The operation is, in fact, little more than an exploratory incision.—*Lancet*,

RESECTION OF LEFT LOBE OF LIVER.—Dr. Langenbuch (*Berl. Klin. Woch.*, 1888, No, 3) records a case in which he successfully resected the greater part of its left lobe, which had been extensively deformed by tight lacing, and had caused great inconvenience and trouble to the patient. The woman, about thirty years of age, was, in November, 1886, under treatment for erysipelas at the Lazarus Hospital, and when about to be discharged convalescent, she begged that she might be relieved of a painful abdominal tumor that rendered life unbearable, and caused pain both on standing and on lying down. On examination a tumor of the size of the fist was detected in the epigastrium—dense, elastic, not fluctuating, moving with respiration, and its dulness continuous with that of the liver. The diagnosis lay between hydatid tumor and deformity from tight-lacing (*Schnür-leber*), although the latter condition usually involves the right lobe. An exploratory incision proved that the case was of this kind, but involving the left lobe, and probably for that reason producing the painful symptoms. Dr. Langenbuch decided that it would be advisable to remove the source of so much distress, especially as the portion of the lobe forming the tumor was practically cut off from the rest of the organ by a broad but ligamentous pedicle, and therefore it was functionally of no service. Accordingly, the pedicle was transfixed by ligatures, and the lobe excised. The same evening symptoms of severe internal hemorrhage appeared, and, on re-opening the wound, the abdominal cavity was found to be filled with blood; this was sponged out, the bleeding vessels secured, and no further trouble arose from that source. The wound healed, but recovery was somewhat retarded by the development of ascites, which necessitated tapping on two occasions. It could not be determined how far the ascites were due to the cardiac debility and hydræmia resulting from the previous prolonged attack of erysipelas and the profuse hemorrhage, or how far it might have depended on the diminution of the hepatic circuit. There was œdema elsewhere, so the former hypothesis had some support. At any rate it was not permanent, and the patient left in February quite well. The portion of liver removed weighed three hundred and seventy grammes (about twelve ounces), and Dr. Langenbuch says that the case shows the feasibility of removing the lobe of a tight-laced liver when this gives rise to serious discomfort.—*Lancet.*

MERCURY WITH CHALK IN THE TREATMENT OF TAPE-WORM.—The writer has sometimes found mercury with chalk a most effective tæniacide, and cites the following case in illustration: "G W., aged thirty-one, a blacksmith by trade, had complained of an indescribable feeling in his stomach, bowels, and all through him, as he termed it, for three or four years. There was a wild look in his eyes, and a pecular appearance of the skin which attracted people's attention, so they would ask what ailed him. His appetite was fastidious; at times he would eat voraciously, then again eat nothing. He became greatly emaciated, and vomiting grew so incessant that he was unable to retain any food. The vomiting had continued about six weeks when I first saw him. He had been treated by several physicians, but said he was getting worse instead of better. I gave him three powders of hydrargyrum cum creta, with directions to take one, morning, night, and morning, with a dose of castor oil after the last powder. He came back in three days surprised, smiling, and happy, saying he had passed a tape-worm thirty feet long. He was no longer troubled with vomiting, ate heartily, improved rapidly, and he has felt like a new man ever since the worm was expelled."—Dr. Squires, in *N. Y. Med. Rec.*

FLUID EXTRACT OF ERGOT FOR INCONTINENCE OF URINE IN CHILDREN.—I have been using for many years the fluid extract of ergot in the treatment of incontinence of urine in infants and children; and I almost regard it as a specific for the disease. I prefer to give it simply, and to treat separately any condition of the patients that may require therapeutical aid to correct those states of physical debility which either predispose to incontinence of urine or aggravate its presence. I give to an infant from one to three yeaas old, 5 to 10 drops; and to a patient from three to ten years, 10 to 20 drops every three hours. Few children object to its taste, and it should be continued nninterruptedly for two or three weeks, and resumed if the disease should return, in which case the doses ought to be gradually increased.—Dr. Johnson, in *Med. and Surg. Reporter.*

IT is stated, in the *N. Y. Med. Rec.*, that Nussbaum claims to quickly cure erysipelas by the use of ichthyol. The erysipelatous surface is first disinfected, and then painted with ointment made of equal proportions of ichthyol and vaseline. The part thus painted is covered with ten per cent. salicylic lint, and fixed with a gauze bandage. Next day the border is found to have remained stationary, while the inflamed surface is shrunken into yellowish-brown creases, and is painless. After three days the dressing is discontinued. Five consecutive cases treated on his plan gave equally successful results. Icythyol colodion is recommended for applications to the face, and ichthyol soap for the scalp.

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TRINITY MEDICAL SCHOOL AMENDMENT ACT.

Most of our readers may have noticed than an act, affecting Trinity Medical School, introduced during the late session of the House of Assembly, became law. Under it this institution so long and favorably known, becomes *Trinity Medical College*, a standing which it has well earned. The other amendments were merely to enable the "College" to hold a larger amount of property, and refer to investments.

As the Bill was going through the House a short section was added, which would have enabled the "College" to admit to its own examinations candidates who might not have been educated within its walls.

The examinations have been held ever since the first incorporation of the school, and have been always very stringent, with the view of ensuring that a good position should be taken by successful candidates at other examining boards, *e. g.*, those of the several Universities with which this Medical College is affiliated, as well as before the Examiners of the Medical Council, which body alone has very properly the power to grant a "license to practise." Now and then application has been made to the school by registered men in practice, to be allowed to go up for this Medical School Examination—the reason given in every case for making such a request being, that the certificate of Trinity Medical Faculty, although very properly carrying no "license" with it, stands high in general estimation.

These applications have been all refused—and it was felt to be rather an anomalous thing to refuse a request so reasonable, as permission to undergo the same examinations taken by Trinity Medical students, in order if possible, to get a coveted certificate. To meet such cases, the fourth short section above referred to was introduced into the act, and passed through the Private Bills Committee. This section simply added the words "or others" to one of the sections of the original Act of Incorporation. This change, which seems to us rather insignificant, was however held by some of the members of the Faculty of the Toronto School to be equivalent to granting to Trinity "full University powers," a position which is, we think, absurd If the parties who made the statement that such enactment would give Trinity "full University powers" believed it, we are pretty certain that no one else who knows anything about medical education in Ontario would do so. We understand that some of the highest functionaries connected with Toronto University were so much interested in the matter as to do some lobbying against it amongst the members of both sides of the House. The authorities of Trinity Medical School, were somewhat surprised at the amount of interest so trifling a matter excited, and were not over-pleased at the misrepresentation which they believe was made of their case.

The proposed change is really of little importance to Trinity and certainly encroached in no degree upon the privileges of any other institution in the Province, and could not have proved, had it become law, "perilous" to the medical profession in Ontario.

The letters F. T. M. S. are not, we apprehend, the most important that may be appended to a man's name, and yet they are of sufficient importance to be coveted by not a few in this province and out of it, but so far as subversion of our medical liberties is concerned, they are powerless.

It is well known that Trinity Medical College is a steadfast upholder of the Medical Council as the sole licensing body. Alter this, and in Ontario the medical profession would just be where it was many years ago, when every graduating and teaching body was also a licensing body, and when the

question amongst students was chiefly, through which of these numerous portals, they could most easily enter the profession.

But for this one central board, we in Ontario would not to-day be one whit above our friends in the United States as regards the status of the profession, and the standard of medical education.

Nor does Trinity Medical College desire university powers—she is quite content with those she possesses, and has no desire to encroach on the privileges of any other teaching, or degree conferring body in the province. At the same time it does appear singular that her rivals should be so afraid of any one being able to obtain the "*imprimatur*" of this particular Medical Faculty. It speaks well for the standing of that "*imprimatur*," and Trinity medical professors and students will hereafter think more highly than ever of the honors their College has to bestow.

As Trinity regarded the very slight changes proposed in the new section of the Amended Act as of little value, the member who had charge of the bill was asked by the school to withdraw the section altogether.

It is to be hoped that the future of Trinity Medical College, under its new name, may be all that its friends could wish, and may be fully worthy of its past long and distinguished record.

MERCURIAL FUMIGATIONS IN LARYNGEAL DIPHTHERIA OR DIPHTHERITIC CROUP.

The above is the caption of a very interesting and instructive article in the N. Y. *Med. Jour.*, by Dr. Cobbin, of Brooklyn. He draws attention to the nearly hopeless condition of the patient when the membrane has extended from the fauces to the larynx, and to the small benefit, other than a more easy mode of death, which in nearly every case follows tracheotomy undertaken for this condition. Of intubation he speaks more hopefully, and mentions the fact recently published that a favorable result has been noted in about thirty per cent. of a certain series of cases.

He first attempted fumigation in 1874, with the result of seeing the child recover after the hoarse and stridulous cough had set in, and there had been complete loss of voice. The writer goes on to give a statement of a considerable number of severe cases in which the happiest results followed this plan of treatment. No salivation or mercurial toxæmia are reported by him, or by several other medical men with whom he had communicated on the subject. He does not propose that this treatment shall take the place of tracheotomy or intubation, but says that it should be adopted as soon as the physician is satisfied the larynx is invaded. As to the details of the treatment he gives the following :—

I insist, when possible, that the patient be in a room where the sunlight has free entrance, that the temperature of the room shall not be lower than seventy-five degrees, and that the air shall be kept moist by the evaporation of water. During the time of the fumigations the patient receives no medicine whatever. At the beginning and end of a fumigation, milk-punch or wine is given. This I insist upon. A child's crib with barrel-hoops across the top, secured, and over these spread a flannel blanket, makes a suitable canopy or tent. In the case of a child eight or ten years of age I volatilize from forty grains to a drachm of the mild chloride. I keep the child under the canopy twenty minutes, when the blanket is removed. This is repeated every two or three hours during the first day. After this period I expect to find the cough loosened, giving directions to prolong the intervals of the fumigations, and at once to resort to them if the cough tightens. I have had cases where they had to be continued for over a week, but not more than two or three each day. The aphonia may not disappear for a week or two, but this need excite no alarm. Let the patient receive the most thorough alimentation. The fumes are not offensive and as a rule the child makes no resistance after the first fumigation. Generally the patient falls into a refreshing sleep, and sometimes he will point to the lamp, indicating that a fumigation is desired. The lamp had better be powerful enough to volatilize a drachm of calomel in one minute. The lamp I have constructed does this. By this means the air of the tent is not raised to too high a temperature for respiration.

The whole returns so far show a mortality of 16 per cent., and of these some died from albuminuria two weeks after apparent recovery, some from discontinuance of the treatment by the family and from other causes, none of which were

apparently due to laryngeal trouble. This is an exceedingly good showing, and the plan should certainly be adopted if even a much less favorable result should be the outcome of a more extended experience of it.

TRAINED NURSES.

It is a matter of sincere congratulation that nursing is rapidly rising to the status of a profession. We are sure we express the opinions of the vast majority of medical practitioners, when we say that this is as it should be.

As we advance in the science and art of healing, our faith in medicines as *specifics* passes away, and more and more do we come to regard good nursing as a *sine qua non*, in the successful treatment of disease. No one who has not had the benefit of the assistance of trained nurses in his practice, can appreciate fully the vast importance to the patient and comfort to the practitioner of having always present in serious cases, one who by education, intelligence, and scientific training, is able to act as his efficient collaborateur in his effort to combat disease. The great success which attends the treatment of disease at sanitariums, rest cures, and retreats of various kinds, depends certainly not upon the drugs that are taken while there, but upon intelligent methods as to sleep, rest, food, exercise, etc., and, as has been well remarked, those who have made such resorts a notable success, "have laid the foundation of that success by employing efficient nurses."

The training of nurses is of comparatively recent date in America. We in Canada, following the example of the New York hospitals, have now several training schools, and the results of the education of nurses at these schools is already felt, especially in Ontario.

The demand for skill and professional training in this walk of life is rapidly increasing. In Toronto it is often with difficulty that the services of a trained nurse can be obtained, though the school at the Toronto General Hospital is always full, and is certainly turning out large numbers of young women fully qualified to take the office of *aide* to the medical attendant in all classes of cases. Large numbers of young ladies are now applying for admission to the schools—ladies by birth and education, who are ready to take their places as units in this sphere of self-supporting, active, useful life. To be a good nurse requires more than intelligence and education. There must be refinement, quick sympathy, a capacity for governing, and a promptness in meeting sudden emergencies which must always be arising in their daily lives.

The social position of nurses is rapidly improving, as indeed it should do. The educated and trained nurse should be quite on a par, socially, with the doctor, and we are happy to state that in Canada the good sense of the people is placing these women in their true place. There is no reason why the nurse should not be the friend of the patient, and when that day shall have arrived when lady patients need not feel they are treating with inferiors in their nurses, we shall see the best results from a medical standpoint, of professional nursing. The days of Sairey Gamp and Betsey Prig are rapidly passing, and patients, friends and doctors are beginning to understand what a comfort and a blessing in a sick room is one who has the true spirit of nursing, backed by a sufficient training. The two years' course is general in this country and in England, but a movement is now on foot in the latter country to extend the novitiate over three years' time.

The British Nurses' Association has lately been called into existence under the patronage and control of some of the first men in England, among whom may be mentioned Mr. Savory, Sir Joseph Lister, Sir Dyce Duckworth and Dr. Quain, as showing the sense of the importance of the profession, felt by those eminent medical men. It is proposed to adopt a system of registration, so that the public may be able to distinguish thoroughly trained nurses from others who are not. This right of registration of members of the body is sought to be obtained by a charter giving the Association legal power to examine and register nurses; the examinations to be held either by the authorities of the different hospitals or by a central board of examiners. In regard to our own country we are perhaps not yet in a position to take so high ground, or, owing as their greater numbers and means the English are able to do; but we can and should encourage by every means in our power the growth of professional spirit and *esprit de corps* among our trained nurses. There

can be no doubt but that a wide field of usefulness is opening up for numbers of our young women, and already our trained nurses are justly held in high estimation by the profession and laity, not only in our cities, but in the towns and country, whither not a few have gone to practise their profession, the true spirit of which was so well expressed by Princess Christian at a late meeting for the furtherance of the aims and objects of the British Nurses' Association, in the following words :—

" Perfect service rendered, duties done,
In charity, soft speech, and stainless days,
These riches shall not fade away in life,
Nor any death dispraise."

BINIODIDE OF MERCURY IN SCARLET FEVER.—Dr. Illingworth, in the course of a discussion on scarlet fever (*Ed. Med. Jour.*), spoke strongly as to the great value of this drug in the treatment of scarlet fever. He has had the happiest results from its use, as it "modifies the course of the fever, reduces the temperature, checks or altogether prevents the inflammation of the skin, and prevents the dreaded sequelæ." He ascribes these benefits to the germicidal properties of the drug. By giving the bichloride solution of the B. P., with pot. iod. in excess, he holds it in solution and prevents mercurialism. For a child of seven years he orders half drachm doses of the bichloride solution, with one and a half or two grain doses of pot. iod., every two, three or four hours. As soon as the rash disappears and the temperature becomes normal, iron is given. He applies the biniodide locally to the throat when necessary. The exact formula for this preparation is as follows :—Add 10 minims of a 1 in 4 solution of potassic iodide to an ounce and a half of a 1 in 500 solution of the bichloride, and sweeten with glycerine. This he applies to the throat three times a day by means of a brush. In malignant cases he gives iron. In kidney troubles, with dropsy, he depends upon iron, with an occasional dose of jalap powder. When convulsions from uremia supervene, he practises venesection, and believes he has saved life thereby. He does not keep up the quarantine more than ten or twelve days if the throat be free from mischief, regardless of desquamation. He thinks one or two carbolic soap baths about the tenth day are sufficient to prevent infection. When the stomach will not bear the solution, he gives $\frac{1}{16}$ of a grain in powder, three times a day, with pulv. sacch. He believes in the prophylactic action of the drug.

CALOMEL IN CROUP.—Dr. Davis Phillips (*Med. Reg.*) believes that calomel is indicated in the treatment of croup, both from our pathological knowledge of the disease and clinical experience. He has had more favorable results from it in his practice, than from any other method of treatment. He speaks definitely as to its action as follows :—*Action of Calomel.*—First. Removes thickened and infiltrated condition of the laryngeal mucous membrane, with the accompanying sub-mucous œdema Second. Renders the exudated lymph less fibrinous and more readily absorbed, and diminishes its cohesive attachment to the mucous membrane. Third. Seems, *by its peculiar effects on the intestinal tract, as a whole,* to produce a peculiar impression on the economy *which tends to stop the inflammation*, reminding one, in this respect, of the action of large doses of iron when given in erysipelas.

As to the details of the plan of treatment which he insists should be *carefully* carried out, he gives the following :—An emetic to commence with—preferably the yellow sulphate of mercury—which may be repeated at intervals, if thought necessary ; the throat enveloped in a hot poultice, which should be renewed every half-hour or hour ; the room kept constantly full of the vapors of water and turpentine—made by floating a little turpentine on water, in a vessel, and keeping up constant heat ; from a half to a teaspoonful or more of whiskey in a tablespoonful of milk every hour, and the administration of calomel in one-grain doses every hour until the characteristic calomel stools are produced. The calomel should then be stopped and the chloride of iron and potash mixture given every hour. If the heart becomes weak, strophanthus or digitalis should be given. Relapse should be met by a renewal of the calomel, and if intubation or tracheotomy be necessary, the same treatment should be continued, as neither operation in any way affects the course of the disease.

BORACIC ACID IN CHRONIC SUPPURATION OF THE MIDDLE EAR.—At his clinic recently, Prof. Seely (*Cin. Lancet Clinic*) gave the following conclusions regarding the use of boracic acid in the above

disease: 1. Only a pure and absolutely impalpable powder should be employed. 2. The large majority of these cases get well by simple cleanliness, and keeping the ear in as dry a condition as possible. 3. Boracic acid used by packing the meatus more nearly accomplishes this than when used by inflation. 4. If the powder remains dry, the ear may be inflated occasionally to determine the condition of the middle ear, whether dry or moist. 5. If employed in this manner the boric powder is not only safe, but efficient in many obstinate cases. 6. We can not tell definitely beforehand in what class of cases it will yield good results, unless it would be in those cases where the tympanitic cavity is filled with exuberant granulations. It can be said with all sincerity and safety that little fear need be entertained from the packing of the meatus with boracic acid in chronic purulent inflammation, if the physician inflates the ears daily. The air rushing through the perforation leaves a vent for the pus, if any has accumulated, or it can escape through the Eustachian tube into the mouth.

CROUP AND DIPHTHERIA.—Dr. Ouchlerlony, of St. Louis, in an article in the *Am. Pract. and News*, on the non-identity of pseudo-membranous croup and diphtheria, concludes by giving the following differential diagnosis:

DIPHTHERIA.	CROUP.
Occurs in epidemics.	Not so.
Infectious.	Not so.
Has a period of incubation.	Not so.
Most common in children but occurs at all ages.	More common in children. Rare in adults.
Principal seat, tonsils and parts above the glottis. When invading the larynx it is secondarily.	Primary and principal seat, the larynx and treachea. Implicates the upper parts but to a slight degree.
Grandular enlargements present.	Not so.
Asthenia early and marked.	Not so.
Febrile disturbance more or less prominent.	Generally high.
Symptoms largely due to toxaemia.	Symptoms chiefly due to mechanical obstruction.
Nephritis a common accompaniment.	Not so.
Acute fatty degeneration of the heart frequent.	Not so.
Muscles of the arms, legs. chest, and eyeball in a state of fatty or waxy degeneration, often with paralysis.	Not so.
Duration often more protracted.	Runs it course in a few days.

TREATMENT OF THE COUGH OF PHTHISIS.—J. Milner Fothergill, writing of the early treatment of phthisis, says (*Lond. Hosp. Gaz.*) of the means to be used to allay the troublesome cough: Plain steam is good in irritative cough with dry air-tubes. Iodine, carbolic acid, eucalyptus, Friars' balsam, or ordinary terebene are often excellent medications, and allay cough. The other is a resort to a cough linctus. On this matter opinions may differ. Some use paregoric to allay ceaseless cough, and do a great deal of harm very often therewith, though paregoric is the least objectionable of "cough medicines." The reckless resort to something "to allay the cough" has, in my experience, been too frequently followed by disaster to recommend itself to a thoughtful practitioner. Something to allay cough and preserve sleep at night certainly does more good than harm; but "cough stuff" in the day is my abhorrence. It may be no more than prejudice, perhaps.

THE USE OF SACCHARINE IN DIABETES.—The importance of this compound in giving sapience to food for diabetics has been widely noted, and a good deal of useful discussion has taken place in regard to its value. Dr C. W. Purdy in the *Jour. of the Am. Med. Assoc.*, writes that the following conclusions are justifiable:

1. That in this product we possess a flavoring agent for food and drink, the palatability of which is quite equal to that of the finer grades of sugar, and which may be used by diabetic patients with the greatest impunity. 2. That, through its antiseptic properties, it retards the abnormal fermentative changes in the stomach so common in diabetic patients—thus promoting digestion and relieving flatulence. 3. That, while as yet we are without sufficient practical data to judge of its effect in large doses to diabetic patients, yet both chemistry and physiology would indicate its use for the purpose of favorably influencing some of the more fatal complications of the disease.

TREATMENT OF ABORTION.—The following rules have been observed for three years by Fasala (*Annali di Obstet.*) with good results:—1. An expectant course is pursued when the cervix uteri is closed, and can be dilated with difficulty, and if no signs of the decomposition of the fœtus are

present. 2. Under conditions favorable for the introduction of instruments or the hand, the ovum and its appendages are promptly removed. 3. If decomposition has begun, the cervix is dilated by laminaria tents or metallic dilators, and the ovum is removed. 4. Intra-uterine injections for antisepsis are made with warm solution of bichloride of mercury, 1 to 2,000; in case of hemorrhage, hot solution of bichloride of mercury, 1 to 4,000, and tamponing the vagina, are used.

MEDICAL TREATMENT OF VAGINISMUS.—Dr. Girard gives (*Med. Age*) the following:—1. Bromide of potassium in 2-gramme doses daily. 2. Sulphate of quinine, because of a certain accession of intermittent fever. 3. Friction on the dorso-lumbar region with a liniment composed of 60 grammes of the ext. of hyoscyamus and 15 grammes of chloroform. The author adds that when the vaginismus is accompanied by a fissure in the vulva, he adds to the foregoing treatment the use of suppositories of krameria, made after the following formula:

℞.—Cocoa butter, ... 3 gr.
Extract of krameria, . . . 2 gr.

GLYCERIN IN CONSTIPATION.—Dr. J. Althaus (*Prov. Med. Jour.*) calls attention to a new indication for glycerin. He finds it useful even in habitual constipation. He states that a teaspoonful or even less injected into the rectum, causes a speedy evacuation without pain or irritation. It cures *cito, tute et jucunde.* He explains its action as follows:—"Glycerin, when brought into contact with the mucous membrane of the rectum, withdraws water from it, causing hyperæmia and irritation of the sentient nerves of the rectum, which lead by reflex action to powerful peristaltic contractions, ending in defecation."

DEATH FROM CHLOROFORM.—Dr. Chisholm (N.Y. *Med. Rec.*), in an interesting article, gives the result of his experience in the use of anæsthetics. He has administered or superintended the administration of chloroform in over ten thousand cases. He believes that inversion of the patient who is in danger from the administration of chloroform is the safest plan of treatment. He does not resort to artificial respiration. He also directs that the pillows be taken from beneath the head as soon as narcosis is complete, so that the head may be during the whole operation the most dependent part of the body.

STROPHANTHUS IN METRORRHAGIA.—Dr. Poulet (*Gaz. de Gynecol.*) speaks of the use of this drug in metrorrhagia occurring at the menopause and in stout women during the period of fecundity. He has used strophanthus in both classes of cases for about 3 years. He prescribes 5 centigrams of the powdered seed in a pill made with honey. 2 pills are the dose for the first day, 3 for the second, and 4 for the third, if the flow have not ceased.

SORE NIPPLES.—Dr. Scarff (Maryland *Med. Jour.*) writes as follows:—The following is a recipe that I have been using for a long time for sore nipples in nursing mothers. I cannot report a single case of failure when it has been used as directed. I would like my professional brethren to know of it, not that I consider it a specific, but that it has done me service in many cases when other means had failed. The nipple should be cleaned with a little warm water, to which has been added a small amount of borax, before applying.

℞.—Balsam Peru, ... ℥ss.
Tr. arnica, ... ℥ss.
Sweet almond oil, . . } āā ℥ss.
Lime water, . . . }

M. Sig.—Shake well and apply to nipples with camel's hair brush.

ACNE.—Prof. Shoemaker prescribed (*Med. Times*) for a case of seborrhœa sicca, accompanied by acne, conditions frequently seen in youth:—

℞.—Calcis sulphuratæ, ... gr. ¼.
Ext. calami, ... gr. ij. M.
Make into a pill. Take three times a day.
Apply locally:
℞.—Extracti hamamelidis. fld. . f℥j.
Hydrargyri chloridi cor. . gr. viij.
Aquæ, ... f℥iv. M.

ARSENIC should not be prescribed for women during lactation, say Brouardel and Pouchet (*Jour. de Med.*) In proof of this position, they give a case in which the nursing infant died from arsenical poison, after an unsuccessful attempt had been made to kill the mother by arsenious acid.

Experiments on nursing-mothers, and on the lower animals, confirm this opinion.

NEW TEST FOR SUGAR.—Mr. Marson gives (*Med. Press. and Circ.*) the following:—One and a half grains of the pure salt is dissolved in about 120 minims of urine by the aid of warmth, then add five grains of caustic potash and boil. If sugar be present a dark green precipitate will form, the superjacent liquid being reddish-brown or black, according to the amount of sugar. If no sugar be present the precipitate is greenish-brown in color, and the liquid is colorless.

PHYSIOLOGY "AS SHE IS TAUGHT."—The following (*Ind. Med. Jour.*) is from the pen of a school boy taught in one of our public schools. "The human body is made up of the head, the thorax, and the abdomen. The head contains the brains, when there is any. The thorax contains the heart, lungs and diaphragm. The abdomen contains the bowels, of which there are five—A, E, I, O, U, and sometimes W, and Y."

BRIGHT'S DISEASE.—Dr. Semmola recommends (*N. Y. Med. Rec.*) the following in the treatment of any form of albuminuria dependent on nephritis. Fifteen grains of iodide of sodium, thirty of phosphate of sodium, ninety of chloride of sodium, dissolved in water, and given in the twenty-four hours, alone or with milk.

TO CURE HICCOUGH.—Dr. Dresch (*Bulletin Gén. de Thérap.*) says, instant relief from hiccough may be had by causing the sufferer to close the external auditory meatus with the tips of his fingers, making firm pressure, while at the same time he is given water to drink in small swallows.

At New Glasgow, N.S., Dr. George Murray, aged 63.

By Dr. Murray's death Picton County loses one of her most clever physicians and surgeons. He was strictly honorable in his intercourse with his professional brethren, kind to the poor, and courteous to all.

BRIEGER says he has demonstrated that the bacillus of typhoid secretes a ptomaine which he has named typhotoxine. The injection of this into animals produces lesions similar to those caused by typhoid in man.

AN EMBARRASSING SITUATION. — Mrs. Mixer—How sad it is that Mrs. Smith should have had so much illness in her short life. People say, you know they will talk, and for my part I am sure of it, that her death was caused by the last operation she underwent.

Dr. Bismuth—Well, I should not like to say that. But perhaps in this matter I may not be quite unprejudiced, as it was I who performed the operation.—*Translated from German Puck.*

THE COMING ELECTION FOR THE SENATE OF TORONTO UNIVERSITY.—Dr. James Richardson, of Toronto, J. M. Gibson, M.P.P., of Hamilton, and Prof. Alfred Baker, are candidates for election to the Senate of Toronto University. The ticket is a strong one and we have no doubt will receive the hearty support of the medical profession throughout the country.

A Sanitary Convention will be held at Manistee, Mich., June 6th and 7th, under the auspices of the State Board of Health. There is a programme of interesting subjects laid down, and it is expected that the Convention will be a success.

DR. AUMAITRE (*Gaz. Méd.*) says he has had excellent results from salicylate of sodium in whooping cough. He gives two or three grains twice or thrice daily.

JONATHAN HUTCHINSON makes the suggestion that the long-continued administration of arsenic in large doses may produce a form of cancer, closely allied to epithelioma, but presenting peculiar characteristics.

DR. FORDYCE BARKER, says that the most valuable remedy for hemorrhages, occurring near or at the climacteric, is a combination of equal parts of fluid extract of hamamelis and fluid extract of hydrastis.

IT is stated that 15,000 children are annually killed by the use of soothing syrups and other similar preparations.—*Ex.*

DR. J. A. Temple says that the addition of a few drops of oil of sassafras to powdered iodoform, completely destroys its odor.

Books and Pamphlets.

DISEASES OF THE HEART AND CIRCULATION IN INFANCY AND ADOLESCENCE. By John M. Keating, M.D., Obstetrician to the Philadelphia Hospital, etc., etc.; and William A. Edwards, M.D., Physician to St. Joseph's Hospital, etc., etc. Illustrated with photographs and wood engravings. Philadelphia: P. Blakiston, Son & Co. Toronto: Carveth & Co. pp. 207. $1.50. 1888.

This work takes up in an able and scientific manner diseases of the heart in children. This is a part of the field of medical science which has not been cultivated to the extent that the importance of the subject deserves. Most of us have been disappointed at the small amount of information which is to be gained from works on diseases of children, in this particular line. The matter has been collected chiefly from medical journals, clinical lectures, theses, and reports of societies. It is a fairly complete presentation of the whole subject, as applied to young persons, and will be of interest to every practitioner. It is a question whether the photographs, showing mitral disease, give the reader any clearer conception of the lesion than he could gain from the letter-press.

THE CONCISE IMPERIAL DICTIONARY OF THE ENGLISH LANGUAGE, LITERARY, SCIENTIFIC, ETYMOLOGICAL AND PRONOUNCING. By Charles Annandale, M.A., LL.D., Editor of the Imperial Dictionary, etc. Edinburgh: Blackie & Son. Toronto: J. E. Bryant & Co. $4.50. 1887.

We can heartily recommend the work as the best one volume English Dictionary we have seen. It fulfils all the requirements of a dictionary for ordinary use, and is up to the latest date as regards vocabulary, etymology and definition. The printing and binding are excellent, and altogether it is one of the most complete and perfect books in the market.

A MANUAL OF PHYSIOLOGY; a Text-Book for students of medicine. By Gerald F. Yeo, M.D., Dublin, F.R.C.S.; Professor of Phyisology in King's College, London. Third American from the second English edition with three hundred and twenty-one illustrations. Philadelphia: P. Blakiston, Son & Co; Toronto: J A. Carveth & Co. $3.00.

This book has now become so well and favorably known to students of physiology that a new edition will be of special interest. The arrangement is much the same as the previous edition, but a number of new cuts have been added, which materially improve the work.

The chapter on the nervous system is a volume in itself, and most ably and concisely handled, whilst on the phenomena of nerve and muscle, it is particularly to be commended. We consider it a most reliable work, and one which every student of physiology can carefully read with very great advantage and profit. It is especially to be commended as a text-book.

A MANUAL OF MEDICAL JURISPRUDENCE; with special reference to Diseases and Injuries of the Nervous System. By Allan McLane Hamilton, M.D., Consulting Physician to the Insane Asylums of New York, etc. Illustrated. New York: E. S. Treat & Co. P.p. 390. $2.75. 1887.

This is not a work on medical jurisprudence, in the ordinary sense of the term. Its contents are as follows: Insanity, Insanity in its Medico-legal aspects, Hysteroid conditions and feigned diseases, Epilepsy, Suicide, Cranial Injuries, Spinal Injuries. Thus it will be seen that it does not cover the ground usually included in works on medical jurisprudence.

The book is well written and the points made are illustrated by numerous cases. It seems to be a book more for the lawyer than for the doctor but will be useful as an elementary book of reference for either.

THE PASSAGE OF AIR AND FÆCES FROM THE URETHRA. By Harrison Cripps, F.R.C.S., Assistant Surgeon to St. Bartholomew's Hospital, etc., etc. London: J. & A. Churchill. Toronto: Williamson & Co. 1888.

An interesting account of this rare lesion, containing a short history of sixty-three recorded cases. The pathology, symptoms, prognosis and diagnosis are concisely and clearly given. As to operative treatment the author suggests three methods as theoretically possible, viz.: Colotomy, supra-pubic cystotomy and abdominal section.

THE TREATMENT OF HEMORRHOIDS BY INJECTIONS OF CARBOLIC ACID AND OTHER SUBSTANCES. By Silas T. Yount, M.D., Physician to St. Elizabeth's Hospital, etc.; 2nd edition. Lafayette, Indiana: The Echo Musical Co. $1.00.

In this little work of one hundred and two pages, a modern treatment for hemorrhoids is very ably handled; it is a practical work and will be well received by many practitioners.

THE CANADA LANCET.

A MONTHLY JOURNAL OF

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Original Communications.

OÖPHORECTOMY, AS PERFORMED BY DR. JOHN B. DEAVER, OF PHILADELPHIA.

BY DR. INGERSOLL OLMSTED,

Superintendent of the Philadelphia German Hospital.

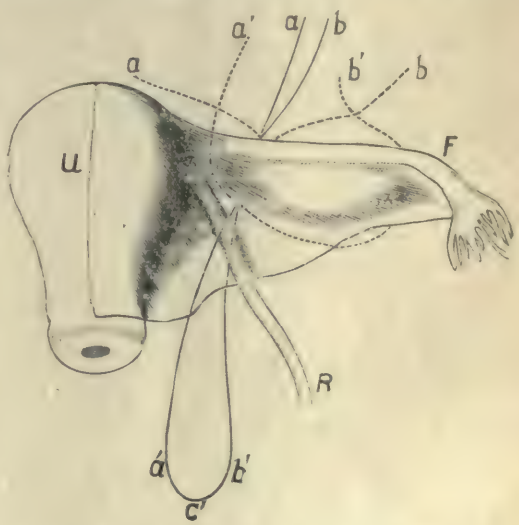
CASE.—N. W., æt. 36, married. Patient having been in hospital for a week; the bowels were thoroughly emptied two or three times by salines; appetite improved by tonics, and skin brought into healthy action by baths and friction. On 23rd Jan., '88, the day preceding the operation, the patient was given a saline cathartic, and had hair on abdomen and part of pubes shaved off.

Jan. 24. In a.m. patient was given an enema, and had abdomen and genitals washed with soap and warm water, the creases around umbilicus being thoroughly cleansed; this was followed by a boracic acid bath. The abdomen and pubes were then washed with the following solutions, in order named: linimentum saponis co., spts. turpentine, sulphuric ether, and solution of corrosive sublimate (1 in 2000). Towels wet with the last solution were then placed upon the parts until time of operation, four hours later. Some beef-tea, and milk and lime water were also administered.

The patient having been anæsthetized with ether, was carried into operating room and placed on a narrow, short table, with buttocks resting close to the lower end, over which the legs projected, supported by an assistant.

The operator and assistant were arranged as follows: the operator on patient's right side, chief assistant on left, behind whom was a third who took charge of instruments, etc., the fourth administered the anæsthetic, and the fifth supported the patient's legs.

An incision about two inches long in median line, was made, midway between the umbilicus and pubes, dividing skin, superficial and deep fasciæ. The small divided vessels were immediately caught up with hæmostatic forceps, a point which was particularly noticeable, and the surfaces of the wound sponged. The incision was then continued through the linea alba down to peritoneum. The operator and chief assistant now washed their hands in hot boiled water. The peritoneum was now caught up with forceps, incised with knife, and slit up to extent of 1½ inches, using finger as director. The operator again dipped his hands in hot water and then passed the index and middle fingers of left hand into abdominal cavity, hugged the under surface of abdominal wall, displaced



a a' and *b b'*, two halves of ligature which has been divided at loop.
c. The dotted lines show how the two ends of each ligature are brought together and tied.
r. Round ligament. *f*. Fallopian tube. *u*. Uterus.

upwards the great omentum, and located the fundus uteri. He then placed the index finger in front and middle finger behind the left Fallopian tube, by which means he was able to grasp the left ovary. It was bound down to the floor of the pelvis by adhesions, which having been carefully separated by fingers, it could be brought to the opening in abdomen, when its pedicle was transfixed, close to the cornu of the uterus, by an ordinary aneurism needle threaded with strong twisted Chinese silk. The loop of silk was then grasped and needle withdrawn. The loop was then divided,

and each half of ligature was tied tightly around the corresponding half of the pedicle; the one ligature thus encircling the Fallopian tube close to cornu of uterus, the ovarian ligament and part of broad ligament; the other half, the remainder of broad ligament; the whole pedicle was then tied with the remaining part of one of the ligatures. The pedicle was then divided with scissors close to the point of ligation, sufficient only being left to prevent the ligatures from slipping off. The stump was sponged off carefully and held up for a short time, when, no hemorrhage occurring, it was allowed to drop back into the abdominal cavity. The right ovary was now grasped and found enlarged, and bound down in Douglas's pouch by adhesions, being closely adherent to the rectum, about one inch above the internal sphinc ter. In order to get more room, the superficial part of the wound was enlarged three-quarters of an inch. The adhesions were separated, the ovary brought to the abdominal opening, and the pedicle treated in the same manner as its fellow.

The abdominal cavity was then carefully wiped out with soft sponges, wrung out of hot boiled water. Two sponges were then left in abdominal cavity, attached to a sponge-holder, until sutures were inserted, when they were removed. The stitches were of silk, and included the entire abdominal wall and peritoneum, and were placed about three-eighths of an inch from the edge of the wound, and half an inch apart.

To procure a nicer apposition, slight traction at either end of the wound was made with a tenaculum, before tying the sutures. The wound was now washed with boiled water, well dusted with iodoform and dressed with about sixteen layers of carbolized gauze, the whole being kept in place by a nicely adjusted, many tailed, flannel bandage. The only antiseptic solution used was boiled water, in which all instruments sponges, sutures and ligatures were cleansed previous to use.

The thread was prepared by being first placed in boiling water for a few minutes and then wound on glass spools, enclosed in a glass box having small holes in the top (one over each spool), through which the thread could be drawn. Previous to the thread being used, it was drawn through a towel wrung out of boiling water.

AFTER-TREATMENT.—During the first twenty-four hours the patient received only a little soda water to sip. She also had morph. sulph. gr. $\frac{1}{8}$, pot. brom. gr. xxx, the first night. This was the only narcotic given during treatment. The next twenty-four hours she received a teaspoonful of magnes. sulph., every four hours, in soda water, till bowels moved; also barley water and some beef tea. On the third day some milk and lime water was administered. Soft food and animal broths were given her on the fourth day, and the bowels were regulated with salines as before.

During the second and third days the patient suffered from pains in the lumbar region. On the third day she had the usual bloody discharge from the wound, which lasted more or less for five days.

The temperature ranged from 98°–99½° F., and never rose higher than the latter figure; pulse between 80–100. On the ninth day, the patient being in good condition, the dressings were removed for the first time, when the wound was found to be perfectly united. The stitches were then removed, the parts washed and dried, and strips of adhesive plaster and the many tailed flannel bandage applied to support the abdominal wall.

The patient was allowed to sit up on the sixteenth day, and left the hospital on the twenty-third day after operation. Since leaving the hospital, the patient has greatly improved, and gained flesh, with no return of her former symptoms.

The unique element in the above description of the operation, is the entire setting aside, during the operation, by one of the first gynecologists of the day, of all antiseptic measures, except boiled water, and assured perfect cleanliness. The result, as shown by the patient's rapid and uninterrupted recovery, warrants my placing it before your readers.

LARGE SPINDLE-CELLED SARCOMA OF THE BRAIN IN A GIRL ÆT. 16.

BY G. A. BINGHAM, M.D.

Pathologist to Toronto General Hospital.

Mr. Auld, who attended her prior to her admission to the General Hospital, kindly furnished me with the following history of this rather interesting case:

Nellie S., æt. 16, has always been in good health, except seven years ago, when she had typhoid

fever, from which she made a good recovery. Family history good.

She first noticed symptoms of present illness about the beginning of August, 1887, when she began to suffer from headache and occasional restlessness at night. She has been gradually growing weaker since that date, although there has been no marked loss of flesh. Saw her first on Saturday, Nov. 26th, 1887; she was very weak, anæmia pronounced, headache intense, and neuralgic in character, pulse and temperature normal. Her menses had been suppressed for about three months. Prescribed—Quiniæ sulph.; tr. ferri mur.; tr. nuc. vom.; et. R. Pil. aloes et myrrhæ et ferri.

Dec. 1st—Complains of dimness of vision; headache continued, and pupils slightly dilated; temperature and pulse normal; vomited two or three times, matter of a greenish color.

Dec. 3rd—Completely blind; headache continued, pulse and temperature normal; examined urine and found it normal.

Dec. 6th.—Very drowsy, sleeping most of the time; other symptoms same as before.

Dec. 7th—Last night headache was intense; gave, chlor. hyd.; morph. sulph. This gave relief, and she slept for the remainder of the night.

Dec. 10th—Has been troubled for two days with incontinence of urine; still continues drowsy. Had several screaming fits last night, presumably hysterical; anæmia seems improved.

Dec. 15th. Appetite morbid; she can distinguish objects in the room.

Dec. 24th—Completely blind again.

This is all the history I have until Jan. 9th, when she was admitted to the General Hospital. After this date until her death she was most of the time in a semi-comatose condition, quite blind; had occasional screaming fits and vomited a few times.

The coma gradually deepened, and she died Jan. 12th. I made the post-mortem on the same day.

P.M. appearance.—Body in fair state of nutrition; eye-balls, prominent; lungs, normal; heart, anæmic, with beginning fatty degeneration; stomach and gall bladder, normal; liver, highly congested, normal in size and friable; spleen, almost colorless; left kidney, smaller than normal, capsule easily separated; right kidney, normal; uterus and ovaries normal; bladder, full of clear urine; brain, blood vessels on dome of brain were congested. In right frontal lobe was found a hard, lobulated tumor as large as an orange, extending to the base of the brain and upwards to within a few lines of the convex surface, extended backward to the ascending limb of the fissure of Sylvius, and formed the anterior boundary of the anterior horn of the lateral ventricle, upon which it encroached. It had a small protuberance from its left side, extending into the left frontal lobe.

The tumor was indistinctly encapsuled, and the brain substance surrounding it was softened and easily washed away by pouring water upon it. This clearly out-lined tumor, on being examined microscopically by Dr. Teskey and others, was found to be a large spindle-celled sarcoma, with here and there a giant cell. In places, the process of degeneration was begun and the cells were beginning to break down.

Remarks.—I think it is worthy of notice, that there were no symptoms observed until about five months prior to her death, and that, even then, it was not thought necessary to call in a physician until a month and a half before she died.

About a month after she first noticed symptoms of trouble, her menses became suppressed and remained so until her death in spite of medicinal treatment. Was this the result of the anæmia, or were both connected reflexly with the cerebral tumor? I have been informed that her surroundings were all that was desirable as regards sanitation, and that she had abundance of nourishing food.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

TWO EXPERIMENTS.

Here are two experiments which show that the combined effects of strychnia and electrization are equivalent to the destruction of the spinal cord. In a rabbit undergoing the convulsions of strych-

* Read before the Physiological Section of the Ninth International Medical Congress, held in Washington, September, 1887.

nia poisoning, the spasms will be at once arrested on breaking up the spinal cord by a wire thrust into the spinal canal. If instead of destroying the spinal cord in this manner, it be subjected to electrization, the spasms will be averted, or arrested if already present. The rabbit dies, but without the characteristic spasms *(a)*. Is a powerful electric current needed here? Not at all. Quite a moderate current will suffice; because the strychnia poison is causing general contraction of the arterioles *(b)*, filling the veins and deoxygenizing the blood. Asphyxia is also setting in from the same cause, joined with fixation of the chest by spasm of its muscles, whose motor nerves are being paralyzed *(c)*. Electrization produces parallel effects and intensifies the fatal processes already in operation. A weak current suffices to complete the arterial emptiness, the venous engorgement and the non-oxydization of the blood. The spasms cease probably because such blood as is now present is inimical to the life of the muscle, and destroys its contractile energy more rapidly than no blood at all *(d)*.

If the theory of the day were true, the rabbit ought not to have died! With the stimulating and vitalizing action of an electric current, added to the previous exhilaration of strychnia stimulation, the rabbit should have lived and flourished, in the interests of the theory, which alas! as usual, is found to be out of harmony with the facts. Why does Dr. J. Russell Reynolds say that "it would be very unwise to use any form of electricity during the period of shock"? *(e)* Why do eminent authorities discourage its employment in cases of suspended animation, as in apparent death from drowning? *(f)* Why does Dr. B. W. Richardson, F.R.S., of London, write: "I feel it too unreasonable to recommend galvanic action as a means of resuscitation in threatened death from chloroform." . . . . fearing least under the semblance of restoring life he should clench death! *(g)*. These are precisely the conditions under which a "stimulant, tonic and vitalizer" should be eagerly sought for and diligently employed! It is evident that electrization is none of these, and therefore it is forbidden "in any form."

I think I am justified in claiming for the foregoing facts that they prove, as fully as any doctrine in physiology can be proved, that electrization as ordinarily employed is a paralyzing process.

BENEFICIAL EFFECTS OF ELECTRICITY.

Electricity is no doubt a valuable therapeutic agent, and like other paralyzing agents, does good in appropriate cases. But its beneficial effects may all be accounted for in strict accordance with its *role* as a paralyzer of nerve activity. Thus, it eases pain in a perturbed nerve by temporarily paralyzing it. It lowers the activity of the vaso motor nerves, and by thus setting free the contractile energy of the muscle it reduces the calibre of the arterioles, lessening or curing congestion, and consequently starving the hypertrophic growths. In other cases, by a momentary arrest of nerve action in the motor trunks, it induces prompt spasmodic contractions in the muscles, thus exercising them, and by attracting blood and pabulum to wasted muscles or tissues in the same way, it improves their nutrition. In chronic indurations and hyperplastic growths the purely chemical effects of the opposite poles, or electrodes, so modifies the nutritive activities of the tissues as to prove beneficial in restoring a more normal condition. Thus the curative effects of electrical treatment are all accounted for in strict accordance with its *role* as a paralyzing agent. To proclaim it, therefore, as "nature's own tonic," or to laud it as a "vitalizer," or extol it as the ally of nerve force, may be pardonable in the instrument makers, but is to be condemned on the part of scientific medicine.

HOW THERAPEUTICS HAS SUFFERED.

It has sometimes been remarked that the department of therapeutics lags behind other branches of the medical art. Perhaps it will be pardoned if I venture to suggest that therapeutics has suffered greatly from the adoption of the *dictum* that electricity is a *stimulus* to nerve function. How much of a huge and hypothetical inhibitory system has found, perhaps, its chief support in this very error. When electricity stopped the heart, some mechanism had to be found for the arrest of its action by a stimulus. On what must the excitation expend itself? Not on the proper motor ganglia of the heart, which a stimulus would drive faster. To

(a) Matteucci, Periera, Radcliffe. *(b)* Fothergill.
(c) Ringer. *(d)* Foster, Phys., pp. 126, 833.
(e) Lect. on Clin. Uses, p. 84.
(f) Dr. Ringer, Ther., p. 792.
(g) Med. Times and Gazette, 1861; Braithwaite, Jan., 1873, p. 256.

meet the exigency of the theory it was necessary to imagine a purely hypothetical system of inhibitory nerves, the excitation of which, by antagonizing the proper motor ganglia of the heart, would bring it to a standstill. It is worthy of notice that in this experiment "the most marked effects are produced when the electrodes are placed on the boundary line between the sinus venosus and the auricles." (*a*) Now this is the precise location of the chief motor ganglion of the heart in the frog, —the animal in which this observation has been made, so that the assumed stimulus has to pass over the proper motor ganglion in order to reach the supposed inhibitory ganglia, farther away in the septum dividing the auricles! It needs explanation why, under these circumstances, the "stimulus" should ignore the motor ganglion in order to excite its rivals, which are further out of reach of the current.

The theory of the day on this subject, or rather the "temporary hypothesis," as Dr. M. Foster calls it, necessitates that the action of drugs be wrought out amid the struggle for supremacy between two rival nerve factions or camps, as it were, with results which are far from encouraging. For instance, a recent physiological work on the "Action of Medicines," informs us in the opening paragraph regarding belladonna, that "It paralyzes the motor nerves in frogs at the same time that it excites the spinal cord; after they recover from the motor nerve paralysis the tetanic symptoms of spinal stimulation appear"! Would it not be well to try how far the results might be simplified on the view that, under the circumstances, the heart's action ceased from paralysis of its motor ganglia;—thus dispensing for a time with this part of an inhibitory incubus, which threatens to become unmanageable through its very complexity?

THE VOLUNTARY MUSCLES.

The foregoing considerations have reference especially to the relations of nerves to involuntary muscles. Why it is that muscles of the voluntary or striated class do not also pass promptly into a state of spasm or contraction when their motor nerve trunks are cut, or when the body is dead, I am unable to explain; unless it be admitted that here the motor nerve trunks are more than mere carriers of nerve force—are in fact, with the nuclei and nerve plates at their endings, miniature magazines of nerve energy, which continue for a time to restrain the muscle after section of the nerve trunk or after somatic death.

POST-MORTEM MUSCULAR CONTRACTION.

If such an hypothesis were admitted it would serve to explain certain phenomena for which an explanation is necessary, such as the remarkable contractions of muscles which are known to occur in certain cases after death. There can be no doubt that the activity of both nerve and muscle survives for a time the death of the organism. The life of the nerve, which is more intimately dependent upon vital conditions, succumbs before that of the less vital and more enduring contractile power of the muscle (*b*). And as one fasciculus, or one muscle, or one group of muscles attains its freedom, the contraction which follows gives rise to the movements referred to.

RIGOR MORTIS.

Is a muscle contracted or shortened when it passes into rigor mortis? All observers agree that such is the case, and Dr. M. Foster tells us that the shortening and contraction "may be considerable." (*c*) Is this contraction and shortening the last act of the muscle in dying, or does it occur after the actual death of the muscle—that is, in a dead muscle? Let us consider the latter view first, since it appears to be the one in favor by our physiological teachers at the present time.

If the muscle be dead, not only is its nerve force extinct, because nerves die first, and consequently there can be no stimulus from nerve energy to cause the muscle to contract, and further, the chemical changes in the muscle which generate its contractile force must also have ceased to operate, so that its contractile power is at an end. In the assumed absence of contractile energy, it has become customary to attribute the death-stiffening to coagulation of the muscle plasma in the muscle. This would account for the rigidity of the muscle, but would fail to account for the contraction and shortening admittedly present. Muscle plasma, in the living muscle, bears the same relation to the myosin of dead muscle that certain albuminous substances in the circulating blood do to fibrin, after blood is drawn off in a vessel. According to Dr. Lionel Beale, fibrin is "non-living matter, and

(*a*) Dr. M. Foster, Phys., p. 232.

(*b*) *Ib.*, p. 121. (*c*) *Ib.*, p. 94.

is the product of the death of albuminoid bioplasm." (*a*) If this be true of fibrin, it may fairly be assumed to be true also of myosin, which closely resembles the former. Coagulated plasma, or myosin, is dead, and if the muscle also be dead, and its inherent contractile power at an end, in what manner does dead myosin acting on a dead muscle produce so perfect a counterfeit of muscular contraction, that one of the keenest observers of the day pronounced it "The most steady and persistent contraction which muscle can possibly exhibit"; (*b*) so perfect a counterfeit, indeed, that our eminent English physiologist, the late Dr. Carpenter, employed the microscopical appearances of muscle during rigor mortis as the chief basis for his description of the changes taking place in ordinary muscular contraction, as he himself has told us (*c*).

Again, the reaction of a living muscle in repose is neutral, or alkaline, but after exercise, or tetanus, the reaction becomes acid, an effect in some way depending upon the chemical processes in the muscle associated with its contraction In rigor mortis the reaction becomes "most distinctly acid" also. But if the muscle be already dead and these chemical changes at an end, what is the source of the acidity? To the presence of this acid, the coagulation of the myosin and the rigidity of the muscle, are of late attributed. But since the acidity is the *result*, or *effect*, of muscular contraction in the living muscle, how can it be the *cause* or starting point of the contraction and stiffening in the dead muscle?

Dr. Lauder Brunton finds that muscle plasma "coagulates too quickly in the muscles of warm-blooded animals to allow of its preparation from them." Now rigor mortis does not usually set in for several hours after death,—Dr. Brown-Sequard found it to be ten hours in four rabbits,—and its onset may even be artificially delayed. The statement, therefore, is only explicable on the supposition that coagulation of the mnscle plasma and rigor mortis do not occur together—that is, as cause and effect. It would seem to be implied that the muscle plasma coagulates too early to be the cause of rigor mortis. Dr. Brunton further shows that the muscle plasma may coagulate without producing rigor mortis. In an experiment, detailed on page 363 of the Hand-book, it is shown that, if half a fresh muscle be immersed for a few minutes in water at a temperature of 104° Fah., the reaction will be acid, as Dr. Brunton says,—"from development of rigor mortis" The other half of the muscle is to be placed for a similar time in boiling water; and here the reaction "will be alkaline." Dr. B. adds,—"Before rigor mortis had time to set in, the albumen of the muscle was coagulated. This coagulation set free a quantity of alkali, hence its reaction." Dr. Brunton's exposition of this experiment, if correct, would be fatal to the myosin hypothesis, since if the coagulation of the muscle plasma be attended by an alkaline reaction while in rigor mortis, the reaction is strongly acid, the former could not be the cause of the latter, and they must be regarded as separate and distinct processes.

The foregoing difficulties certainly seem to create distrust in the myosin hypothesis; and we now turn from it, with its dead muscle and inert myosin, to the other aspect of the case, under which the complete cessation of nerve activity and the final contraction of the muscle marks the onset of rigidity. "The rigidity, the loss of suppleness and the diminished translucency," observable in the muscle in this state, are reasonably accounted for by the condensation of tissue which is here permanent, as the contraction is continuous. That a certain relaxation subsequently occurs, during which meat or game, which is at first tough, becomes more tender and toothy, is attributed by M. Rosenthal to the action of the acid referred to, which relaxes the connective tissue which holds the fibres together, so that the latter separate more readily (*d*). This is but the beginning of the chemical change which ends muscular contractility in the ruin of putrefaction. The following remarkable series of conditions are common both to muscular contraction and to rigor mortis: In both the reaction becomes acid. In both carbonic acid is set free in the muscle. In both the temperature rises,—often markedly so in rigor mortis. In both the muscle is contracted and shortened; in some cases, as in death from cholera, "rigor mortis may be said to be simply a continuation of the

(*a*) Disease Germs, pp. 136, 137.
(*b*) Anstie, Stim. and Narc., p. 70.
(*c*) Hum. Phys., 5th Amer. Ed., pp. 307, 308.

(*d*) Muscles, etc., p. 87-8.

cramps and contractions occurring during life." (*d*) In both, glycogen is converted into sugar. Do not all these coincidences in appearances and effects point strongly to a similarity of processes in muscular contraction and cadaveric rigidity? Of course the parallel is not complete in every particular. It is said that the muscular sound emitted during ordinary muscular contraction is absent. This sound is attributed to vibration of the muscle substance. Might it not be due in part to the altered circulation in the ordinary muscle during contraction, for it is well known that the blood channels, under certain circumstances, give out a musical note? In rigor mortis, of course, the circulation of the blood ceases, as does also the removal of waste products. That the muscle substance continues to vibrate in rigor mortis is evident, because chemical changes are still taking place there, as is shown by what is said above, and especially by "a marked accession of heat"; (*b*) and "heat is only another form of motion." (*c*) So that, after all, it would seem as if the atoms of the muscle continue to vibrate, even though no sound is audible.

That indefatigable observer, Dr. Brown-Sequard, some time ago, related to the Biological Society of Paris, "some experiments he had made, by a special instrument, to determine the movements of single muscles in the body after death. He found that there was a very considerable degree of contraction and relaxation, as much, for example, as two and a-half millimetres in a muscle measuring only six millimetres in length. He thought that the results of his experiments disproved the theory of coagulation in the muscular tissue as the cause of cadaveric rigidity (*d*).

I am not necessitated to prove that rigor mortis is due to post-mortem contraction of the muscles; but in the absence of any other satisfactory explanation of this state, I am entitled to refer to it in support of my thesis; and I would ask those who dissent from this view, and who, in consistence with their theory, must hold that nerve stimulus is necessary to muscular contraction, to account for the presence of nerve force under the conditions referred to.

(*a*) Wood's Prac., Vol. I, p. 717. (*b*) Foster, p. 542.
(*c*) Rosenthal, p. 42.
(*d*) N. Y. Med. Rec., Jan. 9, 1886.

SPASMS IN VOLUNTARY MUSCLES.

It would, perhaps, be no difficult task to show that even voluntary or striated muscles pass into a state of partial spasm or contraction during life, much oftener than might at first sight appear, under a form of "irritation," which may very properly be regarded as consisting in a lowering of nerve activity.

"Irritation" is not increased nerve action. A splinter under the nail is attended by a loss of tactile sensibility. A mote in the eye irritates, but it obscures vision. Why should indigestible food oppressing the digestive functions of a child be regarded as a source of increased nervous "discharges"? Such sources of irritation ought to be considered as depressing, rather than exciting nerve action; a view of the case for which authorities have been already quoted, and others are to follow.

Dr. Anstie wrote, "convulsive action of the muscles, as everyone knows, are very common complications of neuralgia," and the same acute observer held that "pain is not a true hyperæsthesia; on the contrary, pain involves a lowering of nerve function" (*e*).

Dr. Hilton, in his work on "Rest and Pain," points out that the irritation of peritonitis induces contraction of the abdominal muscles. In the same way, pleuritis renders the chest-walls fixed by spasmodic contraction of its muscles; while the muscles of an inflamed joint, he says, "are invariably contracted, and continually tend to increased flexion of the limb, not because such a position is easiest for the patient, which is not always the case, but owing to a reflex perturbation transferred to the muscles of the adjoining surface." (*f*) That peripheral irritations *do* produce nerve paralysis, must be admitted on the authority of Dr. Brown-Sequard (*g*), and others.

What is the "irritation" in these cases but a mild form of nerve paresis, just as "the irregular mucular action" which shows itself in tremor, fibrillary contractions, or in spasm, denotes the failure of the ordinary nervous restraint over the corresponding muscles.

Why should "morbid conditions of the medulla oblongata," avowedly depending on "defective

(*e*) Anstie, Neural., p. 12. (*f*) *Ibid.*, p. 96.
(*g*) Lect. Cent. Nerv. Syst., pp. 160, 170.

nutrition," be supposed to give rise to "explosive and atactic manifestations of nerve force," (*a*) when they are much more naturally explained as depending upon nerve failure? The weak point in the theory of the text-books is, that nerve force is required to be displaying the full activity of robust health, and even more, in exaggerated "discharges" and "explosions" at the very time there is the most undoubted evidence of nerve failure and exhaustion. Why, in cases of "early and late rigidity" of muscles, should a clot in the brain be held to be an exciting irritant, seeing that the brain tissue is wholly insensitive, and may be cut, pricked or seared with a red-hot iron without eliciting any signs of pain? It is difficult to express here the multitude of facts which show the very frequent association of paralysis and spasm in disease of the brain and spinal cord. The paralysis is of the nerve and the spasm of the muscle—conditions very embarrassing to the theory of the day, but consistent and harmonious states in the theory of these pages. Is there not much significance in the statement of Seguin, that "a lesion of the lateral columns of the spinal cord produces paralysis with contracture" of muscles. Why? Because, as Dr. Brown-Sequard has shown, "the motor fibres run on the exterior of the cord in its antero-lateral columns." (*b*) Motor nerve disease and destruction induces contraction of the muscle, which later on becomes atrophied, partly, no doubt, from inaction.

It is on record, too, that while injury of the vagus nerve induces contractions of the gastric muscle, injuries of the spinal accessary nerve are attended by spasms of the trapezius or sterno-mastoid muscles (*a*). Other examples of a similar kind are not lacking.

One might imagine that Dr. B. W. Richardson, F.R.S., intended to endorse the theory of these pages, when he wrote as follows regarding the convulsions of the drowning. He says:—"The convulsive movements that are seen are unconscious movements; they are the same as those which mark the period of stupor, in death by hanging, by noxious vapors, by concussion; and they are simply the results of action of muscles from which *the controlling power of the nervous centres has been removed*" (*e*). [Italics mine]. Dr. Henry M. Lyman, A.M., M.D., would appear also to have had a commendable distrust, if not an entire disbelief, in the theory of the text-books, when, in referring to "a temporary increase of muscular movement directly caused by the abolition of some special source of nervous impulse," he says:—"Witness the tremendous *liberation of muscular movement* which follows a *paralysis* of the influence of the brain, by the sudden decapitation of a fowl, for example" (*f*). [Italics mine].

One of Dr. Ferrier's experiments is so much in point here, that, at the risk of being tedious, I cannot forbear a brief reference to it. The right brain of a monkey had been exposed and subjected to faradization. Next day the animal "was found perfectly well." "Towards the close of the day following, on which there were signs of inflammatory irritation and suppuration, it began to suffer from choreic spasms" which rapidly assumed an epileptiform character. Next day hemiplegia became established with the usual symptoms of "paralysis of the left arm and partial paralysis of the left leg." "On the day following paralysis of motion was complete over the whole of the left side and continued so till death, nine days after.' Dr. Ferrier says, "In this we have a clear case of vital irritation producing precisely the same effects as the electric current, and then destruction by inflammatory softening resulting in complete paralysis, etc.," (*g*).

On Dr. Ferrier's view, the stage of apparent inflammatory action was accompanied by increased production and discharge of nerve energy, as seen in the choreic and epileptiform spasms. But "Recent studies show that the inflammatory process is a destructive and depressive one, so far as the tissues are concerned; that it does not irritate and kindle into increased activity the protoplasm of the cells, but rather the reverse" (*e*). So that it is now definitely understood that the inflammatory process in brain tissue does the reverse of Dr. Ferrier's view, and paralyzes rather than excites nerve energy.

Observe here, that the spasms of the muscles,

(*a*) Anstie, Neural., p. 156.
(*b*) Erichsen, Concus. Spine, pp. 29, 30.
(*c*) Bryant's Surgery, p. 208.
(*d*) Braithwaite, July, 1871, p. 255.

(*e*) Anæsthetics, Wood's Lib., p. 26.
(*f*) Functions of Brain, pp. 200, 202.
(*g*) Editorial, N. Y. *Medical Record*, Jany. 30t 1886, p. 128.

on Dr. Ferrier's own showing, began to occur contemporaneously with the "signs of inflammatory irritation and suppuration," and as this term "irritation" (on so good an authority as the able editor of the N. Y. *Medical Record*), must now be interpreted to mean depression and lowering of cell activity, it follows that the spasms referred to occured from the absence or failure of nerve energy, and not from its undue excitation. Observe, too, that Dr. Ferrier held that this "vital irritation," as he saw it, but which we now know is depression or paralysis, produced "precisely the same effects as the electric current." Another evidence of the paralyzing character of electricity!

(To be continued.)

Selected Articles.

A CASE OF ALARMING HÆMORRHAGE FOLLOWING EXCISION OF THE TONSILS.

The infrequency of such cases as the following would seem to justify its publication:

Norman D., American, twenty-five years of age, law student and athlete, came under my care for post-nasal catarrh and hypertrophy of the tonsils, in May, 1887. Having no faith in topical or general treatment of such a condition of the tonsils, excision was advised and done at my office. Mathieu's tonsillotome was the instrument used; as it cuts from behind forward there is no danger of wounding the pillars of the soft palate, and the screw by which the fork of the instrument is adjusted enables one to cut more or less of the tonsil as is desired. The tonsil was very hard and the cutting was accompanied by a grating noise which was noticed by the patient, as well as myself at the time. The usual amount of hæmorrhage followed, but was soon checked by sipping a solution of the tanno-gallic acid gargle of the London Throat Hospital Pharmacopœia (M. Mackenzie).

Mr. D. left my office at 4 p. m. in good spirits, expressing himself as feeling relieved that the slight operation was over. He ate his dinner at 6 p. m. and said to the family he did so without pain. Soon after he dressed himself and attended a wedding, in church, where, at about 9.30, he complained of a sudden faintness, was assisted to the open air, when he immediately vomited a large quantity of blood—variously estimated by his friends, at from half a pint to a quart. He was taken to his home and put to bed where he again vomited over a pint of dark blood. A neighboring physician was called, and his father came for me.

I saw him at 11 p. m., he was then pale, somewhat nauseated, but as yet there were no signs of prostration. With the help of Dr. Little, who had been with him for an hour, I syringed his throat with hot water, wiped away the clots, and examined carefully for any bleeding vessel. None was found, but a very free oozing of blood was going on from the whole cut surface of the right tonsil. Pressure was made with a wad of styptic cotton over the cut surface, and continued as long as he could bear it, but this was for a few minutes only, as the presence of the forceps provoked a violent retching, followed by vomtiing of blood. Trial was then made of the tanno-gallic acid gargle above mentioned, hot water, cold water, ice, solution of salicylic acid in hot water, Monsel's salt applied to the cut surface and pressed down firmly, the patient lying on his right side. Thus we went through a long list of styptic and astringent remedies, each appearing to check the flow for a time, but as soon as we suspended our efforts for a few minutes he would complain of nausea, and soon after vomit a bloody fluid, showing that blood was still trickling down his throat and being swallowed. Hypodermatic injections of ergotin were given and later on brandy.

About three in the morning Dr. Spier was called, and upon his arrival another careful examination of the throat was made, but again we failed to find any special point of bleeding—as before, it was seen to be a general oozing from the whole cut surface. Dr. Spier made trial of pressure with an improvised clamp, but was able to keep it up for a short time only. He then advised a continuance of the astringents and gave his opinion that it would be checked by them. We continued our efforts in this direction until 10 a. m., when the condition of the patient, cold perspiration, pulse at the wrist very feeble, complaining of thirst and a sinking feeling, for which frequent hypodermatics of brandy were given, made it plain that some more vigorous steps must be taken at once.

Dr. Little, who had been with me through the night, very kindly went for Dr. Spier with the request that he come to our assistance prepared to tie the carotid artery. This he promptly did, the ligature being placed upon the common carotid artery above the omohyoid muscle. I wish to state here that this operation was done at my request, and the entire responsibility for the choice of the common carotid artery rests upon me. This in view of possible criticism.

The tightening of the ligature we expected would arrest the hæmorrhage, but in this we were disappointed, for it continued, as nearly as we could judge, exactly as before. It was now

thought best to call another surgeon to our assistance and a telegram was sent to Dr. Sands asking him to come prepared to transfuse the patient if it should seem best.

The artery was tied at about 11 a. m., and the bleeding continued until about 2 p. m. The last remedy made use of before the bleeding ceased was a douche of very hot water which was used by my friend, Dr. McNaughton. I do not attribute the checking of the hæmorrhage to the hot water however, as it had been used a number of times before during the night. The patient was now pulseless at the wrist and hypodermatics of brandy were frequently given.

Dr. Sands, who arrived at this time, at once proceeded to transfuse, about twelve ounces of a saline solution being slowly injected into the radial vein. The pulse returned at the wrist while it was being done.

From this time on there was no further hæmorrhage and the only bad symptom was a pretty severe chill about two hours after the transfusion, following which the temperature rose to 102°, it, however sank to 99° by the next morning and never rose above that point again. The patient was given nourishing food and *no* medicine; in a couple of days he developed a good appetite. The ligature came away from the carotid on the twenty-first day. The transfusion wound healed without suppuration. The operation was most skilfully done with thorough antiseptic precautions. As soon as the ligatures came away the patient was allowed to sit up and in a week he rode out. When last seen by me, a month later, he still showed very plainly the effects of the hæmorrhage.

The following are some of the points which seem to be of interest in connection with this case:

1. *As to the frequency of such cases.* Different writers make varying statements on this point. Sajous says profuse hæmorrhage occurs perhaps once in five hundred times, while an alarming flow does not occur once in a thousand times. According to Cohen, there are several records of more than a thousand operations at the hands of the same surgeon without the occurrence of any serious hæmorrhage M. Mackenzie makes the following statements of his own experience: "As regards hæmorrhage following excisions of the tonsils, I have only once met with a case in which the bleeding appeared actually to endanger life." In the past fifteen years I have done this operation about two hundred times, and have never met with a case of unusual hæmorrhage before the present one. Taking an average of the statements of the authors I have been able to consult, I should say that such a case as this one occurs about once in a thousand operations. There are quite a number of cases recorded in which the hæmorrhage has proved fatal.

2. *Causes and source of the bleeding.* The tonsil is situated between the pillars of the soft palate "in a sort of niche," resting on a layer of loose connective tissue, by which it is separated from the superior constrictor muscle. The whole gland can be enucleated by the fingers, or a blunt instrument, as was an ancient practice. As the internal carotid artery is external to the superior constrictor muscle it is plainly impossible to wound this vessel in excising the tonsil with any of the tonsillotomes now in use. In the reported cases of injury to this vessel while excising the tonsil, a bistoury has generally been the instrument used. Velpeau reported four cases in which the internal carotid artery was laid open while a portion of the tonsil was being cut away with a bistoury. The vessels which supply the tonsils are the ascending palatine and tonsillar arteries (deep cervical branches of the facial), the dorsalis linguæ from the lingual, the ascending pharyngeal from the external carotid, and the descending palatine from the internal maxillary. Not only do these vessels anastomose freely with each other, but also with those of the opposite side. Ordinarily when a portion of the tonsil is excised the hæmorrhage is free, but soon ceases spontaneously by the retraction of the cut vessels into the soft tissues of the tonsil. But if the tonsil has undergone fibrous degeneration, or is in a condition to which the term scirrhus has sometimes been applied, the cut vessels are held open and prevented from retracting and thus putting a stop to the flow. Sajous says that in the cases of profuse hæmorrhage which occurred in his practice, the tonsils were exceedingly hard to penetrate, which led him to think the cut vessels were kept open by surrounding fibrous elements adhering to them. Schede has remarked, "That very firm fibrous degenerated tonsils specially tend to after-hæmorrhage, in that the vessels within the stiff tissues remain gaping." By referring to the history of this case as given above, it will be seen that both the patient and myself noticed the hardness of the right tonsil, it cut like a scirrhus tumor.

Dangerous and not infrequently fatal hæmorrhage follows this operation if the subject is a "bleeder." Whether Mr. D. was or was not a hemophilic, was discussed at the time. We were told that he, had a cousin on his mother's side who was a bleeder, and that he himself bled till he fainted after the extraction of a tooth about a year before the operation on his tonsils. There was, however, no history of his ever having bled unusually from any of the accidents of childhood, nor any suffering from swelling of the joints; nothing, in short, but the bleeding which followed the extraction of a tooth in his twenty-fourth year. There was no hæmorrhage from the left tonsil nor from either of the wounds inflicted by the surgeons. "In true hemophilia the tendency to

bleed usually shows itself in the first year of life and in the great majority of cases before the fifth year." "Recorded cases of the disease appearing first later than the second dentition are not trustworthy" (Legg–Quain's *Dict. Med.*, art. "Hemophilia"). Other authorities might be quoted to the same effect, but I think it is plain that Mr. D. is not a "*bleeder*," and that the cause of this hæmorrhage was the fibrous condition of his right tonsil, and the source of the hæmorrhage was the above mentioned vessels which normally supply the tonsils.

3. *How to stop the hæmorrhage?* Sir M. Mackenzie in his work on *Diseases of the Throat and Nose*, vol. i. page 86, says that, "The use of the tanno-gallic acid gargle of the Throat Hospital Pharmacopœia will *at once* arrest the hæmorrhage. Half a teaspoonful of the remedy should be slowly sipped at short intervals. During the act of deglutition the styptic is worked into the cut surface of the tonsil and the hæmorrhage is effectually restrained in all cases." If this statement were true in *all* cases it would be a sufficient answer to the above question, but, unfortunately, it does not always succeed in the hands of other surgeons. It was used in the case of Mr. D. and did not appear to be any more effectual than several other styptics which were tried, and all failed to arrest the bleeding. A careful search should be made for any vessels that might be spurting, and if one be found it should be twisted or tied. It would seem that pressure should control this hæmorrhage, but we were unable in this case to stop it in this way. Whether made with the fingers or an instrument, such an amount of retching and vomiting was provoked as to oblige us to desist. The suggestion of Cohen to make pressure with a long pair of forceps one blade applied to the tonsil and the other upon the outside to make counter-pressure, seems to me a good one. If the tips of the forceps were made broad enough to cover the whole tonsil and the handles closed with a catch like the ordinary Pean forcep, it could be firmly applied and left hanging from the patient's mouth without danger of being displaced by the retching.

There are a number of cases like this one recorded in the journals, in which the flow of blood stopped when the patient fainted and did not return afterwards. Dr. De Blois had a case at the Boston City Hospital of most alarming hæmorrhage after tonsillotomy, which continued in spite of all efforts to control it for three and a half hours, when the patient fainted, after which it gave no further trouble (*Boston Med. and Surg. Jour.*, March, 1887, page 309). Schede, of Hamburg (*vide* König's *Surg.*), reports two cases which he observed, where, after various attempts to check the bleeding, it stopped permanently upon the occurrence of fainting. This, in my opinion, is the way the hæmorrhage was checked in the case of Mr. D. He had become very restless and insisted upon sitting up, and it was while in this position, on the side of the bed, supported by his father, that Dr. McNaughton made use of the hot water; he became very faint and would have fallen to the floor had he not been held up, and when laid back upon the bed the bleeding had ceased and did not return.

The common carotid artery was tied in this case, because it is the step advised by authorities under such circumstances. No one of the medical gentlemen who saw this case had had any experience with similar cases. In Schmidt's *Jahrbücher*, vol. 186, is related a case of severe hæmorrhage after cutting of the left tonsil. Various hæmostatics were tried unsuccessfully and in three hours the common carotid was tied (*vide Boston Med. and Surg. Jour.*, March, 1887, page 303). Mr. McCarthy tied the common carotid artery at the London Hospital for hæmorrhage following excision of the tonsil and the patient recovered (Mackenzie). The common carotid artery has been successfully tied by Pepper for hæmorrhage from sloughing tonsils in scarlatina (Druitt's *Surgery*).

Most of the writers on diseases of the throat mention the ligation of this vessel to check hæmorrhage from the tonsil. The common carotid artery is tied in preference to the external carotid, "Because the uncertainty of origin of the vessels which supply the tonsil is against tying the external carotid" (Druitt's *Surgery*, edit. 1887, page 551).

"The operation of tying the external carotid artery is rarely performed, ligation of the common carotid being preferred on account of the number of vessels given off from the external carotid" (Gray's *Anatomy*).

While holding myself justified by the above mentioned authorities for the course pursued, yet the result of tying the common carotid artery in this case convinces me that it was an error. It had no appreciable effect upon the flow of blood, and in view of the origin of the vessels which supply the tonsils and of their free anastomosis, not only with each other but also with their fellows of the opposite side, it could hardly have been expected to have.

In many of the reported successful cases of tying this artery it is stated that the source of the hæmorrhage was the internal carotid, and probably this is true of all of them. Believing it to be impossible to wound this vessel in excising the tonsil with a tonsillotome, I should, in any future case of excessive hæmorrhage following this operation, depend upon pressure, hæmostatics, and placing the patient in an upright position to encourage fainting; and if the patient were not a bleeder should expect to arrest the hæmorrhage by these means.—Dr. S. E. Fuller, in *Am. Jour. Med. Science.*

CLINICAL EXAMINATION OF CHILDREN

Patience and care are required in the clinical examination of sick children. They are easily frightened, and this disorders circulation and respiration, hence we cannot commence the examination of a sick child abruptly, but there are many things which we can study without contact with the child while it is becoming accustomed to our presence. We can observe the color of the skin. This is waxy in atrophy, tuberculosis, and wasting diseases, yellow in icterus and post-natal discoloration. There are irregular patches of purplish hue in meningitis, dependent upon diminished power of the vaso-motor nerves; these are produced on the cheek, forehead, and neck by pressure of the pillow or the nurse's arm. There is a general congestion of the face in some cases of typhoid fever in its early stages. A circumscribed patch is seen on the cheek in pneumonia and in hectic fever dependent upon tuberculosis or collections of pus. In pneumonia the patch is livid, in hectic pink. The skin is leaden in color or blue in chills, livid in croup, capillary bronchitis, œdema of the lungs, and all diseases of imperfect aeration of the blood. A similar color is seen in cyanosis from whatever cause. There is paleness in nausea and shock. The "tache cerebrale," which is pathognomonic of meningitis, may be brought out by a simple scratching of the skin by the finger nail or a pencil. This is dependent upon the same cause as the irregular mottling of the cheek above described. The redness to which this name is applied persists for a considerable time after the application of the irritation, and I have never been able to produce it except in meningeal inflammation. There is also the white stripe, which may be produced upon the skin by similar means in scarlatina. There are also peculiar eruptions, which we must learn to recognize, in scarlatina, measles, erysipelas, and variola. The rose-colored spots of typhoid fever, the petechiæ of typhus, scorbutus, and epidemic cerebro-spinal meningitis, are of value in a correct diagnosis.

In chronic diarrhœa the skin becomes of an earthy hue.

The eyes when asleep, in health, are directed upward beneath the upper lid, and the pupils are evenly contracted. The pupils may be dilated, irregular, or sluggish in their action from cerebral disease, or from disease located in the structure of the eye itself. They are often dilated to a great extent in the early stage of typhoid fever, and when this occurs it shows that the nervous system is profoundly implicated. Dilatation occurs also in the later stages of diarrhœa, when there is great exhaustion. The eyelids are also partially open during sleep, in the later stages of exhausting diseases, as the result of loss of muscular tonicity in the orbicularis muscles. In the same cases there is an accumulation of sebaceous matter over the cornea, and a great loss of sensibility, for flies may crawl over the eye without any inconvenience. These symptoms are indicative of great danger.

There is photophobia in meningeal or cerebral disease, also in phlyctenular conjunctivitis. Tears make their appearance about the fourth month; they disappear during severe disease, and their reappearance is an indication of improvement. Respiration in diseases of the lungs becomes more frequent. Respiration is interrupted in cerebral disease, and is a symptom of great value. In croup, inspiration is noisy; in asthma and emphysema, expiration is noisy. It is sighing and slow in nausea.

Cough is hoarse and ringing in the commencement of croup, becoming extinguished as the disease advances; spasmodic and subintrant in pertussis; constant and synchronous with each expiration in some cases of irritation of the laryngeal nerves. Cough sometimes exists as a symptom of worms in the intestines, and of jaundice; in these cases it is of reflex origin.

The cry of children in typhoid fever is of constantly changing fancies, and may be changed by external impressions, while in meningitis the cry is a constant repetition of the same word, at intervals more or less regular, with an unvarying cadence.

In some cases of cerebral irritation and typhoid fever, I have observed that the hands are kept constantly in contact with the genitals, and I have learned to regard it as a grave symptom, and that to a great extent it is involuntary.

The persistent flexion of one extremity points to lesion in the brain. Flexion of the thumbs or toes, contractions of the eyebrows, grinding of the teeth, and startings, are often the prodromes of general convulsions. Contraction of the lower extremities, with crying, writhing, and twisting of the body, are symptoms of the colic, vesical irritation, rectal tenesmus, pricking of pins, etc., and constant pulling at the penis in young boys sometimes is seen in calculous disorders, and in congenital phimosis.

There is retraction of the head in meningeal disease, irregular muscular contraction without loss of consciousness in chorea, boring of the head into the pillow in cerebral irritation and rachitis.

Apathy and quietude in a child are suggestive of rachitis when there are no other indications of disease, and when this is joined to sweating about the head and general soreness the diagnosis is positive.

An intermittent pulse points with great certainty to disease of the brain, and an extremely frequent and feeble pulse is the forerunner of dissolution.

Vomiting may be incidental to the conformation of the stomach, or a symptom of disease.

is one of the first symptoms of scarlatina, variola, or intussusception; it accompanies abdominal inflammations, whooping cough, and sometimes pneumonia. It is one of the most rebellious symptoms of meningeal inflammation; in this disease it is forcible, and has been compared to the action of a force pump. The abdomen is tumid and distended in diarrhœa, but retracted and boat-shaped in meningitis. It fluctuates in dropsy and purulent collections in the peritoneal cavity, and is nodular from enlargement of mesenteric glands. In cases of intussusception the coils of the intestines roll beneath the surface like a mass of writhing snakes. The presence of undigested masses of casein or other albuminous matter in the stool tells that the disorder is in the stomach digestion. Excessive watery discharges in summer point to sympathetic paralysis. There are many things to be learned by inspection, and in obscure troubles it should never be neglected. Needles have been found driven into the brain through the fontanelles, perforating the chest and the abdomen, and plunged into the liver.

One of the earliest evidences of diseased action is found in variations of temperature. In scleremia there is a reduced temperature from the beginning.

The production of heat in excess of the natural standard is the result of several factors. There may be increased metamorphosis of tissues; impressions upon the vaso-motor nerves, and the actions of poisons upon the blood, as in zymotic diseases, where we infer an action similar to a ferment—all these may be capable of modifying the heat producing processes; but the subject as yet is to be more fully investigated before we can be fully enlightened. This much we know, there seems to be fully a established law that according to the height of the temperature above 98.4° the gravity of the case and its danger is increased. In intermittent fever there is a great rise of temperature during the febrile paroxysm, often to 104° or 106°, but it speedily begings to decline. In typhoid fever the temperature rises to 102° early in its course, and then by about half a degree or a degree to 104°, which point it does not often pass in children, unless there are complications in the lungs or peritoneal cavity. In diseases of the respiratory organs, when the parenchyma of the lungs is affected, the temperature is notably higher than when the mucous membrance alone is affected. In tubercular meningitis there are great ranges as well as irregularities in the course of the temperature; the maximum recorded is 108.5°, the minimum 95°. When the substance of the brain is affected, the rise scarcely ever exceeds 101°. A pulse rate increased to 130 or more per minute and a temperature of 102° is prognostic of meningitis, while a pulse rate of 110 to 120, with a persistent temperature of 104°, points to typhoid fever as the disease.—*Mass. Med. Jour.*

COCAINE IN OBSTETRICS.

1. Vomiting in Pregnancy.—Weiss administers hydrochlorate in doses of one-sixteenth of a grain, by mouth, every half-hour. Fraipont prefers to administer it by subcutaneous injection of twenty minims of a four per cent. solution into the epigastrium. Englemann relates a most obstinate case, where morphine, cauterization of the os uteri, and injection into the rectum of CO_2 had all been tried without avail. He gave ten minims of a ten per cent. solution thrice daily by mouth, with recovery in two days. Bois relates the case of a young multipara who was brought to a moribund condition by pregnancy vomiting; she had arrived at the fourth month. He made a pomade of cocaine hydrochlorate and vaseline (one in fifty) and placed a piece the size of a filbert against the os uteri: a fresh application was made night and morning. Amelioration of her symptoms soon began, and at the end of three weeks recovery was complete. The writer had two cases. In a nervous primipara at her seventh month, vomiting occurred after every meal, and she was induced to lie upon the couch all day, but unfortunately with no good effect. After trying the usual remedies, he prescribed as follows: Cocain. hydrochlor., one-tenth grain; tinct. aurantii. ♏x; mist. chloroformi, ʒ ss; aquam ad ʒ i; every three hours. There was a peculiar numb sensation about the tongue and fauces after each dose, but the effect upon the stomach was remarkable. The vomiting gradually ceased, and in three days she was able to take soup, and in a week became quite well, and went to the termination of her pregnancy without further trouble. In case II., vomiting was general all day, the patient being at the end of the fourth month. The drug was administered as before, and was taken continuously for a fortnight. The vomiting gradually ceased, and never returned. Of course here it might have stopped in consequence of the natural progress of pregnancy.

2. Early Stages of Labor.—Mr. Phillips had four cases, three being successes, and one failure. A. B, a primipara, aged 18 years, had been in labor six hours when he saw her. The os uteri just admitted the tip of the examining finger, and no thinning of the lips had as yet occurred. The pains were most severe; she was throwing herself about and crying continually One of Head Moore's cones was inserted immediately after a pain; it was almost entirely dissolved in nine minutes. The effect was at once apparent, the pains coming more regularly even than before: but between them the patient gradually dozed off and cried out no more. The effect of the drug was kept up for four hours, at the end of which time the os uteri was thined out and dilated fully. Labor terminated naturally. The next two cases

were counterparts of the foregoing; but the last, for some unexplained reason, was entirely unrelieved. In order to understand the effect of the drug, we must try to analyze the early pains of labor. Two agents unite to produce them. 1. The pain of uterine contraction,—similar, indeed, to any other organ consisting of smooth muscular fibre, endeavoring to expel its contents. 2. The pain resulting from the stretching of the nerves of the cervix, and the lacerations of the cervical tissue which doubtless occur. Over the first, cocaine has no control, and its beneficent effect in this stage is due to its mitigation of the second kind. Doleris painted the uterine neck through a speculum with a four per cent. solution of glycerin and hydrochlorate of cocaine. Of eight cases, in six the results were decidedly affirmative. Jeannel relates six cases, and in five of them (three of which were successful) he applied cotton-wool tampons soaked in a five per cent. solution to the cervix and posterior vaginal cul-de sac. In the first case he cautions us against the use of bichloride of mercury with cocaine, as he found the former decomposes alkaloids with great rapidity. In three successful cases by Fischel, a two per cent. solution was applied to the cervix on a tampon, and repeated every twenty minutes. In two others, however, a similar application of a four per cent. and then a two and a half per cent. solution produced a negative result. The method adopted by Hartzhorne is to introduce, through a female glass syringe, as high up as possible behind the cervix, the following mixture: cocaine, 6 parts; glycerin, 20; and vaseline, 24.

Mr. Phillips differs from those who use the speculum. The objections appear to be (1) the exposure necessary; (2) the idea which must imbue the patient that some operation is about to be performed in spite of assurances to the contrary; (3) the removal of the vaginal discharge necessary before the application of the drug, which would be detrimental to the course of the labor; (4) a very large number of hyperæsthetic primipara can scarcely bear an ordinary vaginal examination, much less the introduction of a speculum, and these are the very cases in which cocaine is of so much value.

3. Expulsive Stage of Labor.—Here the factors causing pain are much more numerous. The pain from compression of the mucous membrane against the pelvic bones is the only form that any relief is obtained from, as all mucous membranes are anæsthetized by a two per cent. solution of cocaine. The part this factor, however, takes in the totality of an expulsive pain must be so slight that it may be neglected, and almost before making experiment we can say, on physiological grounds, that any certain or marked relief is out of the question. In six cases in which he has tried the drug either in the form of saturated tampon (five per cent.) or painting the vulva with it, he has found practically no amelioration of the pains. It is little probable that cocaine can be used as a local anæsthetic in labor, because anæsthesia and analgesia developed under this drug are essentially superficial, while the pains of labor are the result of distention and stretching of the tissues through their whole thickness.

4. Obstetric Operations.—In this class it has suggested itself that cocaine might be useful to anæsthetize the vulva in the operation for induction of premature labor by catheter, or the application of forceps on the perineum, or removal of adherent after-birth. Hale reports two cases where it was entirely successful in post-partum "vesical neuralgia." He injected twenty minims of a two per cent. solution into the urethra, with an immediate disappearance of the pain. A case is related in which cocaine was applied with success to the vulva of a recently-delivered woman in order to pass the catheter, and there seems no reason why, in cases like this, the drug should not be of great service.

5. Sore Nipples.—Hergott first made a local application of a four per cent. solution in nine cases, and concludes that suckling can be allowed without pain. The fissures rapidly heal, and cauterization of them by nitrate of silver becomes a painless proceeding. Mecuen found complete relief from pain in three cases. Mr. Phillips has tried a six per cent. solution in four cases. The anæsthesia produced was more or less deep, but only lasted two minutes, and the sores certainly did not tend to heal more quickly. In three cases weaning was deemed necessary, while in the fourth healing took place, and successful lactation followed. Children do not object to taking the nipple after the application of the drug, nor do they appear to suffer in general health.

We may therefore draw the following practical conclusions: 1. That cocaine, in whatever way administered, for uncontrollable pregnancy vomiting is a valuable adjunct; and, in some cases, a superior drug to those at present in vogue. 2. That during the painful earlier stages of labor, especially in primipara, it materially assuages the pains, but neither quickens them nor retards their onset, and hence has no effect on the actual dilatation. 3. That it is useless in mitigating the pains of expulsion and those caused by pressure on the perineum. 4. That in the case of sore nipples it relieves the pain attendant on suckling, though the duration of its effects is not sufficiently long to be of material service.—Dr. Phillips, in *Lancet.*

Rohé uses a 1 in 10 solution of liquor sodæ chlorinatæ in gonorrhœa. He finds the discharge promptly ceases in the majority of cases.

THE THERAPEUTICAL VALUE OF BISMUTH SALICYLATE.

Some months since I called attention to the many advantages possessed by the bismuth salicylate in the treatment of summer diarrhœa in children, since then I have been able to employ it successfully in other affections of the alimentary canal.

In an experience extending over two years, with its use in the treatment of inflammatory affections of the gastro-intestinal tract, seldom has it failed to accomplish the desired result and permanently cure the disease. In severe cases of diarrhœa occurring in phthisical patients I have effected diminution in the number of stools by half-drachm doses of the drug at intervals of two hours, reducing the amount of the dose on the amelioration of the symptoms. In cholera morbus, after the cause has been removed, this agent will soon reduce the existing inflammation and induce a cessation of the morbid action.

In dysentery, acute in character and of the sporadic variety, it has proved efficacious when full medicinal doses have been administered, allaying the disorder with great rapidity.

The diarrhœa accompanying enteric fever, especially in children, I have been able to control by its use, when other well-known remedies for this disorder had failed. If impossible to administer by the mouth, an enema may be employed, but in that case, the amount should be double that given by the mouth; and it should always have a small amount of opium administered with it.

In dyspepsia, with acid eructations and pyrosis, with a feeling of heaviness at the stomach after the ingestion of food, bismuth salicylate, in combination with simple bitters, soon tones up the organ and relieves the disorders. Recently, Dr. James Ware, of Lake Charles, La., communicated to me the following cases in which he had found the preparation useful:

1st. Female, æt. forty-five; dysentery. At the end of five days of treatment with opium and so on, I gave:

℞—Bismuth salicyl., ... gr. c.
Bismuthi subnit., ... gr. c. M.
Ft. pulv. No. vj. div.

Gave one powder every three hours. The woman was entirely relieved in twelve hours.

2nd. Female, æt. twenty-three; dysentery. Gave salicylate as above, also by enema, thus:

℞—Bismuthi salicyl., ... gr. cc.
Glycerinæ, ... f ʒ j.
Aquæ, ... f ʒ vj. M.

Sig.—f ʒ, in three ounces of tepid water, after each stool.

Woman was well in forty-eight hours.

3rd. Child, æt. three; never fully recovered from an attack of cholera infantum last summer. Relieved by salicylate in eight-grain doses.

4th. Male, æt. twenty-five: periodical fermentation of contents of bowels every ten or twelve days for a year. Relieved now at the beginning of every attack, by fifteen grains each of the bismuth salicylate and subnitrate.

5th. Female, æt. twenty; pruritus vulvæ. Suffered terribly for several days. Used corrosive sublimate, carbolic acid, and other remedies with no benefit; then employed:

℞—Bismuthi salicyl., ... gr. c.
Aquæ, ... f ʒ iv.

As a vaginal injection; relief instantly.

6th. Female, æt. fifty-six. Fermentation of contents of stomach and bowels every ten, twenty or thirty days for twenty years, accompained with violent pain and frequent discharges of acid mucus. Relief generally came in from thirty to seventy-two hours. In the midst of an attack I gave ten grains each of salicylate and subnitrate, with immediate relief. She has taken this amount night and morning for thirty days, with no return of the disease.

The preparation of this drug I have used is a pure white, very flocculent and light material. In beginning the treatment of any inflammatory affection of the alimentary canal, full and decided doses should be administered, and subsequently, when decrease in the severity of the symptoms takes place, the amount may be lessened. In severe cases occurring in children I never commence treatment with a dose less than five to eight grains.

The formula I prefer in cholera infantum and many other diarrhœal disorders in children, is the following:

℞—Bismuthi salicyl., ... ʒ ij.
Tr. capsici., ... gtt. xij.
Spts. ammon. aromat., . . . f ʒ iss.
Pulv. acaciæ, ... ʒ ij.
Aq. cinnamomi, q. s. ad., . f ʒ ij. M.

Sig.—Teaspoonful every two hours, for a child from three months to one year of age.

In the adult I prefer to use the preparation in powder, or combined with some other astringents, as tannic acid, acetate of lead, etc. With the bismuth salicylate it is possible in many instances to entirely dispense with an opiate, and this I always endeavor to do if possible.

The beneficial action of this drug is undoubtedly due to the antiseptic power of the salicylic acid as much as the astringent properties of the bismuth. In many cases of vomiting it will control it if given in five-grain doses, also in pregnant women the vomiting may in many instances soon yield to the action of this preparation, and its return to any great extent will be prevented by its continuance in small and frequently repeated doses.—Dr. Hale, in *The Polyclinic.*

THE GALVANO-CAUTERY IN THE TREATMENT OF ENLARGED TONSILS.

In the *Medical News* of March 10th, I notice the report of a paper read by Dr. Frank Hamilton Potter before the Medical Society of New York, on "The Galvano-cautery in the treatment of enlarged tonsils." It embodies, I think, the experience of the majority of those who have *had* experience in the matter There has lately been a great deal of literature on the subject in both home and foreign journals, but there are a few points deserving of mention which I have not seen dwelt upon sufficiently.

1st. As to pain. The fact is that while many tonsils may seem utterly devoid of sensation when hypertrophied, others, on the contrary, are quite sensitive to the application of the hot wire. Often, in the same patient, one tonsil may be cauterized freely with total immunity from pain, while the other is so sensitive as to require the application of cocaine, which, I think, should be avoided in the throat, if possible. I think most operators will agree with me that it is not always a "painless operation" as Dr. Potter sums up.

2nd. As to the number of ignipunctures made at one sitting, I had the advantage of Dr. Knight's personal direction before he read his paper at the last meeting of the American Laryngological Association. At that time and since then, I think, he had limited the number of punctures to at most five or six at one sitting (I only write from memory, and may be mistaken,)

Since then it has been my custom to regulate the number of punctures almost entirely by the size of the tonsil and the sensitiveness of the patient to the application of the hot wire. Whenever I have a comparatively insensible organ I make enough punctures to cover the whole tonsillar surface with a slough, even sometimes burning away small projections of tissue altogether. I have used the cautery, with three or four exceptions, for the last nine months in every case of enlarged tonsil I have seen, that number being the proportion usually seen in a throat clinic, for that time averaging 1200 to 1500 new patients yearly, and many times in private practice. With possibly one or two exceptions I have never seen any serious reaction. Occasionally the patient's throat would be very sore for part of the next day, but this has seldom lasted more than two days at the most. One case, I remember, complained of a sore throat for as long as five days. Another had an intervening quinsy, which, however, did not begin until two days after the operation, and may have been simply a coincident. Usually, most reaction is observed in those with sensitive tonsils even if only slightly burned—and mostly after the first sitting—the succeeding operations being followed by little pain.

Of course, this radical procedure can only be adopted at first when the tonsils are still large, because after most of the tonsillar tissue has been destroyed a sensitive area is reached near the normal mucous membrane, where pain always follows any deep or extensive cauterization. When this stage is reached, longer intervals should be observed, as there is always more or less infiltration of the surrounding mucous membrane which will disappear of itself if left untouched.

3rd. As to its use in children. Lately I have ceased operating in patients under the age of twelve with the cautery. It is nearly always unsatisfactory. "Kindness and patience" will often lead the little ones to submit for one or two sittings, by which time you have changed the size and shape of the tonsil so that a tonsillotome can only be used with difficulty, and ignipuncture has become of exceeding difficulty owing to the want of control that even the most tractable child has over its pharynx. You now have a ragged mass of tissue between the faucial pillars full of holes and lodging places for food and secretions.

A tonsillotome, a strong assistant, and a sensible guardian of the child are all a moderately deft operator needs to settle the whole affair of enlarged tonsils in two minutes, without "general anæsthesia" and the danger of blood in the trachea of an insensible patient. I think there are no cases on record of serious—at least fatal—hæmorrhage under the age of twelve. I believe that those who see a large number of cases of enlarged tonsils each year will soon discard tonsillotomy in adults where ignipuncture is possible. In many cases the latter is almost an absolute necessity owing to the diffused condition of the tonsillar tissue, and also, rarely, to the size of the mass to be removed.

4th. As to the number of sittings. I have never met with a case in which the hypertrophied condition was not removed by at most fifteen sittings if properly carried out. Usually half the number is sufficient.

To conclude, recurrence of the hypertrophy is occasionally seen where the tonsil has not been completely removed, or at least restored to its normal proportions. When the two operations of ignipuncture and tonsillotomy are explained to the patient with the advantages and disadvantages of each, I have yet to see the patient who preferred the latter, though one after submitting to both said he preferred tonsillotomy.—Jonathan Wright, M.D., in *Med. News.*

THE *Med. Rec.* the homœopaths of New York are prescribing antipyrine in 15 grain doses.

MEDICAL NOTES.

Manning (*Wiener Med. Presse*) treats *bubo* by injection, every other day, with a small quantity of a one per cent. solution of corrosive sublimate.

An excellent preparation for *chilblains, cold sores, etc.*, is emulsion of oil of sweet almonds, rose water, glycerine and powdered tragacanth, applied on retiring at night.

A CURE FOR WRINKLES—It is said that when lanolin is well rubbed in, it passes directly into the skin and acts as a nutrient to the subjacent tissues, smoothing out the folds produced by the alteration of these structures incident to age.

Huchard, in the *Revue de Clinique*, recommends the following formula for administering *creasote in phthisis* :—

℞.—Creasot,
Iodoform.,
Benzoini pulv.,
Balsam. peru., . . . āā gr. ¾. M.
Ft. pil.
Sig.—One or two to be taken at each meal.

For *cancer of the uterus*, the *Medical Press and Circular* suggests the use of a suppository, as follows :—

℞.—Iodoform, ... gr. x.
Camphori., ... gr. iv.
Extract. belladonnæ, . . gr. j.
Ol. theobromæ, q. s. . . . . M.
Apply every night in the vagina a suppository of this strength.

Bardet, in the *Journal de Méd.*, Dec. 18th, 1886, recommends as a *laxative and gastric tonic* combined, the following :—

℞.—Extract. carscaræ sagradæ
fluid., , ... f ʒ v.
Tinct. nucis vomicæ, . . ɱxxx.
Syrup., ... f ʒ iij, ɱxlv.
Aquæ destillat., . . . f ʒ xxviij, ɱxlv
Sig.—Dose, a teaspoonful. M.

For *Dyspnœa*, Dr. Ellis (*Therapeutic Gazette*, Jan. 16th, 1888) recommends quebracho in the following formula :—

℞.—Syrup. pruni virgin.,
Syrup. tolu,
Extract. quebracho fluid., āā f ʒj
Acid. hydrocyanic. dilut., gtt. xxiv
Morphiæ sulph., . . . gr. iss. M.
SIG.—A desertspoonful, to be repeated *pro re natâ*.

Dr. Thomas Addis Emmet urges that a *displacement of the uterus* should never be corrected simply on its own account, nor until the cause has been clearly ascertained ; nor should a pessary be employed without a clear understanding as to what is to be accomplished by its use, beyond merely changing the degree of version.

Gastritis or *Gastric Catarrh* may frequently be relieved, according to the *Pharmaceutical Record*, by giving the patient the following three times a day, before meals :—

℞.—Bismuth. subnitrat., . . gr. xxx.
Liquor. potassi arsenitis, . ɱv.
Acaciæ pulv., ... gr. xxx.
Extract, hydrastis canadensis fluid, ... ɱxv. M.

Or oxide of silver with extract of belladonna, in pills ; or oxide of zinc, or nux vomica, with other bitters. The milk cure is effective. For acute gastritis, etc., hydrocyanic acid and morphia.—*Coll. and Clin. Rec.*

Credé teaches that all interference with the genitals during labor and the days succeeding it are unnecessary unless there be some special indication for such interference. He does not make a vaginal examination at all unless some abnormality presents itself, relying entirely upon external pulpation and manipulation of his diagnosis.

SULPHUROUS ACID IN THE TREATMENT OF PULMONARY CONSUMPTION.

The French seem determined to get sulphur in some form into the body to cure pulmonary consumption. Dr. Darien (*Bulletin Général de Thérapeutique*, t. cxi., 14) gives the history of the treatment with sulphurous acid. It had been used as far back as the second century. Dr. Solland came upon this treatment accidentally in the following way : It seemed that a sergeant having phthisis had been through different kinds of treatment, and was finally sent to the East without improvement. Nothing could stay the march of the malady, and wearied of continued hospital treatment, he demanded his release and left. Wishing some light employment, he was given the work of opening the doors of the rooms of the barracks where sulphur was burned for disinfecting purposes. To do this he was obliged to pass nine hours of his time each day in a sulphurous atmosphere. In sixty-five days he had completely recovered. A case of chronic bronchitis also recovered after inhaling for fifteen days. M. Auriol was led to its use in phthisis from these facts. He found in a factory at Bellegarde, in a room where sulphur was used, a number of consumptive women who refused to work elsewhere, because they always felt better in this room.

He had a large and closed room fitted up ; in one corner he had a small brazier in which was sulphur slightly moistened with alcohol, and in the

other corner the patient was placed, standing erect and taking deep respirations. Soon the effects of the sulphur were felt, and then the patient continued inhaling until chemically prepared paper in the room showed the lead reaction. At times, when the fumes of the sulphur were too strong, the windows were opened for a short time. To make the inhalations less irritating, a little benzoin or powdered opium may be added to the sulphur. In a little while the patient becomes accustomed to the fumes. These inhalations were practised in the morning and evening, on an empty stomach, and were followed up by exercise in the open air. Medicated inhalations were also used. Sixty-six tuberculous patients were treated in this way, in all of which an examination of the sputa showed the presence of the tubercle bacilli. Thirty of these, who were very ill, had their disease arrested so that the sweats and fever disappeared, the appetite and weight increased, and the bacilli disappeared. The lungs cleared up, and the caseous deposits became fibrous and innocuous. This state of things continued for a year, and no bad symptoms returning, they were considered cured. Many of the others were so far advanced in the disease, and took the treatment so irregularly, that they did not show the same improvement.

M. Dujardin-Beaumetz feeling convinced that there is something in this method of treatment, has fitted up a room in the manner above described, and makes the patients inhale the sulphurous fumes, letting in air from time to time to make it more bearable. In using the fumigation, a lamp or sulphurous candle is employed. The lamp increases the amount of CO_2 in the room, but M. Dujardin-Beaumetz thinks this causes the gas to be taken up more quickly. In the small number of patients treated, only seven, he has had excellent results, and he expects to make another report when experience justifies it. His conclusions are that it is not so good as the iodide of potassium in syphilis, but he thinks it is a cure for many cases. It is not only effective in stopping the trouble, but it acts well in ameliorating the bad symptoms when a cure is not possible. The French are so intensely enthusiastic over everything that seems to promise good results, that they are apt to rush into print before their theories are fully justified by facts. This treatment can, of course, only be carried on in hospitals, and it is to be hoped that equally good reports may be heard later, and that it may not share the fate of the rectal injection treatment.—*Med. Rec.*

SUBSTITUTION AND ADULTERATION.

In regard to substitution and adulteration, it must be admitted that in numerous cases the charge is a true one, and the evil is of growing dimensions. With the reduction in the margin of profits caused by the fierce business competition of the present day, comes the temptation to adulterate or substitute inferior quality. No condemnation can be too severe for the man who thus trifles with human life; and if he cannot carry on his business honestly he had better abandon it and seek some other occupation.

Again, the outcry is made that the physician is to apt to prescribe various remedies more or less proprietary in character, put up by large manufacturing concerns and introduced by skilled advertising, and thus require the druggist to carry an endless variety of such articles in stock, many of which are seldom or only once called for, and thus remain a dead loss to the proprietor. But is the physician much to blame? True, he is sometimes imposed upon by the bland and sauve canvasser, and the glowing printed endorsement of his professional brethren in favor of some new remedy—*vide* stenocarpine. But when he sees remedies in convenient and compact shape, of appearance much more elegant than those he can procure from the corner druggist, and of at least equal efficacy, is it to be wondered that he should prefer X., Y. or Z.'s manufactures to the oftentime imperfectly prepared remedies of the pharmacopœia?

And why should the druggist complain? *As long as he keeps open store he must submit to the unalterable law of traffic, namely, the needs of the customer are to be supplied.* He will buy Lubin's extracts for Miss Jones, and Alfred Wright's for Miss Brown. Why should he not keep Bromidia for Dr. A. and Papine for Dr. B? Although he makes a great out-cry about being obliged to carry so much stock, he in reality does it to a very limited extent, and, outside of a few standard preparations, shifts the burden on his wholesale druggist and lets him carry the supply for him. Nearly all the large manufacturers have established depots for their goods in the principal cities, and the druggist very rarely lays in a stock outside of his actual present need, unless he is sure of a steady sale. And let him remember also that if he don't keep what is called for, someone else will, and his customers will be sure to go where their needs receive best attention.

And here let a word be said for that much abused class, the modern manufacturers of pharmaceutical specialties. The medical and pharmaceutical profession owe to them a great debt. It is their industry and their capital which have developed the perfection of the coated-pill, and the compressed tablet, the pancreatic ferment and the scale pepsin, the smooth and palatable cod-liver oil emulsion, and the perfected extracts of malt. To their energy do we owe the modern methods of treating disease with pre-digested and concen-

trated foods—a plan which has been the means of prolonging many valuable lives. They have spread the fame of American pharmacy over the entire globe, and established its supremacy against all competitors; therefore let them receive at least just recognition and honor for their labors.—*Phila. Med. Times.*

NOTE ON NITRO-GLYCERINE IN EPILEPSY.—I have used it in nineteen cases. It may be administered in solution, one per cent., or in pilules of 1-100 of a grain; and I find the latter, as prepared by reliable chemists, very satisfactory. I begin with two, three times a day. As individuals appear to differ in their susceptibility to this drug, each case must be tested before the proper dosage can be determined. I doubt if any good follows unless the physiological effect is obtained. Sensations of flushing of the face, fullness of the head, and a pleasant glow over the body, indicate that the proper dose has been reached. In some patients these symptoms are produced by one or two pilules, but in others not until six or eight have been taken. Headache and dizziness were the only unpleasant symptoms complained of, and on this account, in two instances, the medicine had to be stopped. I have notes of nineteen cases in which the nitro glycerine was tried for periods ranging from six weeks to six months. In thirteen of these cases there were severe epileptic seizures, six were instances of *petit mal* with occasional convulsions. Briefly stated, in nine cases there was improvement, as shown in the reduction of the frequency of the attacks. Of these, six were cases of major epilepsy; and three, instances of *petit mal*. The benefit was usually manifested within a week or ten days. Thus case 16, a man aged 27, had had fits for ten years, and when seen, April 5th, had as many as two or three a day. He had taken potassium bromide largely, and at one time with great benefit. Antifebrin was given in gr. viii, two or three times a day, but seemed to be without any influence. On June 1st, nitro-glycerine was given, ♏v of the one per cent. solution, three times a day. Within a week the attacks were greatly lessened, and in the second week after beginning he had only two attacks. He continued to take it all through the summer, getting up to ♏ viii doses, t. i. d. He does not think that anything he has ever taken reduced the fits so much. On November 11th, he stated that he had stopped it for a month; the attacks have recurred less frequently, and he had been able to be at work.

In some of the cases in which the betterment was most striking at first, the remedy seemed to lose its influence, and after a month or two had to be abandoned. I cannot say that in any one of the nine cases the improvement has been more than temporary. In two of the cases of *petit mal* the attacks were greatly reduced, and one patient remained free for two months, but I learn by letter that the attacks have returned. Altogether, my experience has not been very encouraging. We may say that, in a limited number of cases, when the bromides have failed or are beginning to lose efficacy, nitro-glycerine may be used with advantage.

ELECTRICAL TREATMENT OF UTERINE FIBROIDS AFTER APOSTOLI.—An Edinburgh correspondent writes that Keith accepts the teachings of Apostoli. "Keith and son in less than five months have applied electricity in strong, and accurately measured doses more than 1,200 times upon more than 100 patients, the majority being cases of uterine fibroids. The labor of these operations was very great, but it opens out a study which increases daily in interest. Several cases came to them for hysterectomy in uterine fibroids. After treatment by Apostoli's method these women have gone home without operation, with menstruation almost normal and improving after their return. In every case the tumor was reduced in size, the pain gone and they enjoyed the freedom to walk about and life itself, in a way to which they had long been strangers. In one case only has there been a return of hæmorrhage. The tumor had gone down two-thirds, and unwilling to detain her longer in town she was permitted to go home too soon. Should these improvements be permanent, and he has every assurance from experience of Apostoli that they will be, the field of hysterectomy is reduced to the narrowest possible limits. He would consider himself guilty of a criminal act, were he to advise his patient to run the risk of her life before giving this treatment a fair trial. Dr. Playfair has been experimenting industriously on this subject since his return from the summer holidays. He is not quite decided concerning it in all respects, but does not hesitate to declare it a therapeutic measure of much power and considerable promise. I doubt, however, if it will fulfil Apostoli's enthusiastic estimates. He has found it very valuable in membranous dysmenorrhœa and chronic endometritis, with glairy glutinous discharges. One or two of his cases have been quite remarkable and have yielded to two or three applications. Playfair has had one remarkable case of rapid absorption of a large fibro-myoma under negative electro puncture. The case had been under his observation for years, by the application of currents of 100, 150 and 200 milliametres, it has been reduced from the size of a large human head to that of a small orange. There was, however, considerable pyemic and constitutional disturbance which at one time caused considerable anxiety. If not carried out with care and discrimination, this electrical treatment may cause serious accidents."—*Med. Times.*

Unhealthy Royal Families.—"It is recalled now that Bismarck, who was already the chief man in Prussia, in 1858, strenuously opposed the marriage of the Crown Prince with the English Princess, saying that he was against any 'blood alliance with those scrofulous Guelphs.' The existing situation is a strange retributive comment on that utterance. Scrofula, or that worse allied disease with which so many royal strains of blood are contaminated, lays a heavy hand on the Hohenzollerns at San Remo and Berlin alike; but the taint has not come from England. A fact which has been privately known here for some months may now properly be mentioned. The present aged Dowager Empress of Germany, mother of the Emperor, has been a victim to hereditary scrofula, or a cognate malady, for many years. She got it from her mother, Marie Paulowna, who was a daughter of the crazy Czar Paul, one of the most thoroughly diseased men of his generation. All of Paul's daughters transmitted the taint to their descendants. One of them, Anne Paulowna, was mother of the present King of Holland, and the recent death of both his sons and the extinction of his male line are attributed to this. In the male Romanoff line the same malady caused the death of the Czarowitz, who was the elder brother of the present Czar, and now renders it very doubtful if the present youthful Czarowitz will ever reach manhood. In the Hohenzollern case, not only is the Emperor suffering from this hereditary taint, but his son William, who in a few weeks or months will be Emperor, is hereditarily deaf, and was born with a mere shapeless ball of flesh where the right hand ought to be. The Emperor's only sister is the Grand Duchess of Baden, and of her two sons one died last month, and the other is ill at Cannes and not expected to recover, both from scrofulous developments. The malady can, in truth, be traced all through the Almanack de Gotha among descendants of the Czar Paul. The disease only showed itself in the Empress Augusta when she had advanced in life, since when she has worn high dresses, and frequently was not visible to the public for months at a time." It may be recalled that one of Queen Victoria's sons had epileptic attacks and died of purpura hæmorrhagica.—*N. Y. Times.*

Colchium in the Uric Acid Diathesis.—In an address on the *Therapeutics of the Uric Acid Diathesis*, Dr. I. Burney Yeo says that Dr. Bartholow's description of the effects and uses of colchicum is so complete that he has little to add to it.

"The prejudice against colchicum has induced Ebstein to make the extraordinary statement that it is preferable to relieve the pain of the gouty paroxysm by hypodermic injections of morphine. He says they act "quicker, more easily, and with less danger." I join issue with him utterly. The internal use of opiates in gout I consider, except under exceptional circumstances, indefensible. In a disease of defective elimination, you would be giving a drug which depresses in a remarkable manner the functions of all the excretory organs but the skin. A very shall dose of morphine will, especially in the gouty constitution produce clay-colored alvine evacuations, sometimes for days.

Colchicum then, I maintain, is one of the most valuable remedies, when judiciously given, for most of the morbid manifestations of this "uric acid diathesis," and so far from being a dangerous vascular depressant, I have shown, in my hospital practice during the session just passed, that in a case of chronic gout with subacute exacerbations, moderate doses of colchicum restored regularity and strength to an irregular and feeble pulse. I trust, then, that the absurd prejudice against this most valuable remedy which has been excited in the minds of the public will be removed, for I find many gouty persons who, much to their own disadvantage, positively refuse to take colchicum, because they have been told it is "such a dangerous drug."—*Br. Med. Jour.*

Tobacco Heart.—Of the cases of heart disease recently treated in the writer's room, at the dispensary, nine were diagnosticated as functional disorders due to the excessive use of tobacco. All the nine cases occurred in young men between the ages of seventeen and twenty-seven years.

The tobacco was used in all the cases in the form of chewing, the amount ranging from a half a pound to one pound a week. The habit of chewing was begun early in life in all the cases; in one case at the age of five years; the oldest age noted at which chewing was begun was twelve years; the average was seven years.

The symptoms complained of were palpitation, pain and dyspnœa. Palpitation was present in all the nine cases, and was greatest upon making any exertion. Irregular action of the heart at the time of the examination was noted in only one case. Pain was complained of in seven cases, and always had its seat immediately over the heart or under the sternum. Dyspnœa was complained of in only three cases, and was not excessive. Hypertrophy of the heart as evidenced by increased area of cardiac dulness was noted in two instances In both cases the dulness extended to the right edge of the sternum. In the two cases in which hypertrophy had occurred, care was taken to exclude any other cause than tobacco No murmurs were noted in any of the nine cases.

Treatment consisted in prescribing total abstinence from the use of tobacco, and in some cases, where this alone did not suffice, the moderate use of bromide of potassium. Notwithstanding the great length of time during which tobacco had been used, and the early age at which the use had

been commenced, this simple common-sense treatment usually sufficed to give entire relief after three or four weeks. In only one case was digitalis used.

Benzoate of Sodium in Acute Follicular Tonsillitis.—L. C. Boisliniere, Jr., in a communication to the *St. Louis Cour. of Med.*, says that in upwards of one hundred cases of acute follicular tonsillitis, the following formula has been used :

Sodii benzoat . . . . . ʒi-iv
Glycerini,
Elix. calisayæ . . . . . āā f ʒj
M. Sig.—One teaspoonful every one or two hours.

In the analysis of the last seventy-five cases, he finds that : 1. By the use of benzoate of sodium the disease is cured in from twelve to thirty-six hours, a great gain in time, as the average duration of the disease has been heretofore from two to five days. The average duration for the seventy, five cases was twenty hours. In private practice when the cases could be watched more carefully, the white cheesy points have been frequently seen to disappear in from eight to ten hours. 2. The benzoate of sodium undoubtedly controls the febrile elements in the disease. 3. It may be given with impunity, even to children ; he has never been able to discover any bad or even disagreeable effects from its action. 4. It is a valuable addition to the remedies used in throat affections, especially in an acute inflammatory condition of the tonsils, when applications only aggravate, and gargles increase the trouble.—*Med. and Surg. Rep.*

A Study on the Etiology of Phthisis.—R. W. Philip, of Edinburgh, concludes from a series of experiments upon the sputum of phthisis that (1) in view of the work of Koch, it is impossible to avoid admitting that a causal relationship exists between the tubercle bacillus and the phthisical process. 2. The mere predication of this relationship is not sufficient in explanation of the clinical facts and the generally fatal termination of such cases. 3. The usualy received explanations of the *modus moriendi* in phthisis are insufficieut. 4. It appears probable that the lethal influence of the bacillus is due to the production thereby of certain poisonous products. 5. Clinical and experimental evidence appears to indicate that the morbid secretions from the respiratory surfaces afford a good medium for the growth of the tubercle bacillus, and, presumably, for the elaborating of such products. 6. Such a product is separable from the carefully selected and prepared sputum. 7. This product is possessed of well-marked physiological properties, being eminently toxic to frogs, mice, and other animals. 8. The toxic properties of the product are, speaking generally depressant. 9. More particulary they include a marked depressant influence on the heart. 10. This depressant influence seems to be exerted through the medium of the cardio-inhibitory mechanism. 11. The toxic action of the product is more or less completly opposed by atropine. 12. The amount of the product which may be seperated appears to bear a distinct relation to the abundance of the bacillar elements present. 13. Absorption of the poisonous product most probably occurs by way of the lymphatic circulation.—*Brit. Med. Jour.*

Professional Visits.—The number of professional visits which a physician can make in a day has of late been the subject of some discussion. A New England doctor is credited with having made thirty-five calls in twenty-four hours, besides attending three confinements. The West produces something far ahead of this in the person of a Sacramento doctor who claims to have made one hundred visits a day, besides attending four confinements ! The *Medical Age* promises something from Detroit that will even surpass the hyperkinesis of Sacremento, and we await the anecdote with eagerness. It appears to us that the conscientious physician can hardly make more than twenty or thirty calls a day and do his patients justice. Naturally much depends upon the distance which one is obliged to travel. But allowing fifteen minutes for travelling and fifteen more for the briefest average of visits, it will be seen that a doctor must work fifteen hours a day to make even thirty visits. And fifteen hours' work in these days turns even conservative knights of labor into raving anarchists.

It has been related that certain physicians in this city have habitually made forty to sixty visits daily ; but inquiry has shown that the story is false, or the physicians have been homœopaths.

We trust there will be no ambition to break the record in number of daily visits. It is quality, not quantity, that is needed.—*Med. Rec.*

Vaccination Against Typhoid Fever.—Chantemesse and Vidal communicated to the Societé de Biologie, at the meeting held March 3rd, some interesting observations on vaccination against typhoid fever. They claim that in mice inoculated with cultures of typhoid bacilli a disease is produced, with lesions the same as in human typhoid fever. Mice inoculated with bouillon in which colonies have lived, but which no longer contain the bacilli, resist subsequent inoculation with the most intense typhoid virus. From the large number of observations, this would seem to be well established. On the other hand, mice inoculated with bouillon in which indifferent microbes had grown, such as the bacillus subtilis, did not resist, and were not in the slightest degree protected against the typhoid virus. The saturation of the organism with the soluble chemical

substance produced by the typhoid bacillus granted immunity from the effects of the fresh virus. The observations are of value as illustrating the influence of organic substances produced by the growth of bacilli, and they indicate, too, the direction in which we may hope for practical results from bacteriological work.—*Med. News.*

BARNES: THE CAUSES, INTERNAL AND EXTERNAL, OF PUERPERAL FEVER.—The simplest forms of puerperal fever arise from deficient gland excretion, and are due to the accumulation of waste material in the blood. They are purely autogenetic; endoseptic.

In another set, the noxious matter is not strictly formed in the body, but is still manufactured by the patient (from decomposition of animal tissue in any part of the parturient canal). A most powerful predisposing cause is hæmorrhage, as it increases enormously the activity of absorption. With the hæmorrhage may be associated a relaxed state of the uterus. These forms, which include some of the cases described as septicæmia, sapremia, and putrid fever, may be called autoseptic.

In a third class, exoseptic, the empoisonment comes from foreign sources, brought by the physician, nurse, linen, or other external media, and includes the cadaveric poisons and the poisons of the so-called zymotics. The specific zymotic poison received and developed in the nursery ground of the puerperal blood is modified, and undergoes a form of metabolism.

The relation of puerperal fever to zymotic fevers in general is graphically demonstrated by means of two sets of tables: the first showing the mean curves of the general temperature and rainfall, the deaths from scarlatina, erysipelas, fevers in general, and puerperal fever during the thirty years from 1845 to 1874, and the second the same for the ten years following (1875-'84). The comparison of these curves is particularly interesting and instructive, as the separate histories of ten years can be studied in parallel with the history of the preceding thirty years. The similarity of the curves is most remarkable, and affords strong evidence of the uniform prevalence of like causes. The tables also illustrate a fact that has been widely recognized, that zymotics are most fatal in the winter. The author speaks particularly of this one fact in connection with puerperal fever, and attributes it in great measure to the prevalence of faulty methods of ventilation, which draw damp, foul air to the sick-room from basement, cellar, or closet; all places where sewage contamination is likely.

Prophylaxis consists in preventing both poisoning from without and the absorption of peccant material generated in the patient's genital tract. The main factor in this latter defense is complete uterine contraction, which should be secured after every labor by the use of a firm binder and the administration of ecbolics, as quinine, cinnamon, nux vomica, ergot, and digitalis. The uterine douche is valuable, but should not be used unless there are indications that septic absorption is going on in the uterus.—*Brit. Med. Jour.*

HULKE ON A CASE OF LONG-CONTINUED PRIAPISM AFTER COITUS.—On Dec. 27, 1885, an artisan, aged 34, was admitted with priapism. His penis was stiffly erect, very turgid, hard, tender and painful. The greatest tenderness corresponded to the attached part of the left crus. The patient said that one week previously, after drinking heavily of cider, he had intercourse with his wife on going to bed at night. Neither he nor his wife was aware of the occurrence of any thing unusual in the sexual act. He afterwards fell asleep. On waking next morning his penis was still erect, and it was also very painful. This condition persisting, and the painfulness of the organ increasing, he was at length constrained to come to the hospital for relief. A mixture containing sulphate of magnesia and tartar emetic was given to the man at short intervals until he was nauseated and purged, and after this he was directed to take bromide of potassium in doses of fifteen grains, three times daily. The penis was smeared with extract of belladonna and unguentum hydrargyri.

On January 3, 1888, a week later, no obvious alteration in the state of the organ having occurred, the above treatment was abandoned and the continuous application of ice substituted for it. This was followed by a marked, but very slowly progressive, decrease of the turgescence. On Jan. 17th the penis had become soft, pendulous, and painless, so that he was then able to bear the pressure of his dress and to leave his bed. Next day he returned to his home. At that date the only remaining objective trace of the former condition was a small hard knot near the posterior extremity of the attached part of the left corpus cavernosum. Abstention from coitus during several weeks was strictly enjoined. He was next seen on February 19th, when he reported that he had obeyed the injunction till two nights previously, when he attempted coitus, but failed through incompleteness of erection. The further history is unknown.—*Lancet.*

CASE OF AORTIC ANEURISM.—Under the care of Dr. Dyson, Physician to the Sheffield General Infirmary. Reported by Mr. G. W. Crookes. The patient, thirty-four years old, a railway-spring worker—a very hard and laborious occupation. About two years ago he complained of severe pain in his left shoulder, dull, aching and much intensified by movement. Subsequently he had severe pain in the left side of the neck and down the arm, which at the time had the character of

cervico-brachial neuralgia. Very little improvement was effected while in the Sheffield Infirmary, and he was sent to the sea-side. He returned thence very little better, and on re-admission to the Infirmary it was found that his left pulse was considerably less in volume than the right, and was a little later in the time of its beat. The pain in the neck and arm continued, and in addition he had severe pains and tenderness just over and just below the left sterno-clavicular joint. On careful examination a tumor was detected in this situation, which had most of the physical signs of aneurism. There was a patch of dulness about the size of the palm of the hand, expansive pulsation over the area of dulness, a systolic bruit, and in the centre of the dull patch, a swelling the size of a marble, which pulsated visibly and palpably, and threatened shortly to invade the intercostals and the skin. There was no thrill, no alteration in the pupils, no difference in the expansion of the two sides of the chest, no paroxysmal dyspnœa, no stridulous breathing, no alteration of voice, and no dysphagia. Heart apparently healthy. The treatment consisted in an ordinary liberal diet, scrupulous rest in bed, and the administration of iodide of potassium in increasing doses. He is now taking fifteen grains three times daily with no apparent inconvenience. His condition is greatly improved. The pain in the neck is much diminished, pain and tenderness over tumor nearly gone, pulsation is much less in quantity and distribution, and feels like the jog of a solidified body; the tumor is much less distinct. Patient has gained flesh considerably. There was no history of syphilis, the probable cause of the aneurism being the strain produced by the man's laborious work. His present condition would lead one to suppose that a cure is being effected.—*Med. Press and Cir.*

Laceration of the Cervix Uteri and its Relation to Disease.—In the *Archiv für Gynakologie* is a paper by Nœggerath, read before the Society of German Naturalists and Physicians in September, 1887. In this the writer opposes the operation of repairing the cervix. He says: Out of 100 cases of uterine disease which he had observed, in 50 the cervix had never been lacerated. Displacements of the uterus were equal in both—those lacerated and those not lacerated cases. Twice as many women without lacerated cervixes were sterile after the birth of their first born; and out of 20 cases of abortion, 12 occurred in women without lacerations. Erosions and eversions were more frequent in the nullipara. Ectropion was affirmed to be due to a swelling of the lips and might occur in an intact cervix. Eversion in cases of laceration was produced by introducing Sims' speculum, which put the anterior and posterior vaginal walls on a stretch, and thus caused a rolling out of the lips.

Nœggerath claims that women conceive more readily when the cervix is lacerated than when intact, and they abort less frequently; that displacements of the uterus are not produced by lacerations of the cervix; that hypertrophy of the uterus is an accompaniment, not a result of laceration; that laceration of the cervix has no influence on producing uterine disease. The erosions and ulcerations occur with equal frequency in the torn and in the intact cervix; that ectropion is not the immediate result of laceration, and that restoration of the original shape of the *portio vaginalis* can have no influence upon the existing condition of the uterus.—*Am. Med. Jour.*

Papoma.—There has lately been introduced to the notice of the profession in Canada, by J. Wyeth & Bro., of Philadelphia, through their agents in Montreal, Davis & Lawrence Conpany, a farinaceous food for infants and children, which deserves more than passing notice. It has been advertised in the *Record* before pronouncing our opinion. This we have done for the past four months, during which time Papoma has been the almost exclusive diet of artificially fed children under our charge. The results have been satisfactory in a high degree. The food was in every instance readily taken, digestion seemed to be carried on perfectly, and the bowels acted with marked regularity. Its power is great, for growth was steady. In several instances, where development was apparently at a stand-still, change of food to Papoma was followed in a few days by a decided improvement. We have, therefore, no hesitation in recommending Papoma to our readers as a very valuable addition to the list of infantile foods.—*Canada Med. Rec.*

Base-Ball Pitcher's Arm.—A. H. P. Leuf has contributed an interesting paper on this subject, in which he clearly sets forth the pathology of this affection. It seems that in its severer and more chronic forms we have a painful ostitis and periostitis, combined with a strain of the ligaments and muscles. In order to give the ball different curves individual sets of muscles are called into play. For instance, to give the in-curve, the pectoralis-major, the biceps, brachialis anticus, and flexors of the forearm; the out-curve is accomplished by the pectoralis-major, coracobrachialis, infraspinatus, teres-minor, and the ulner muscles; the down-curve strains especially the pectoralis-major, trapezious, deltoid, and serratus magnus; the up-curve is caused by the pectoralis-major, biceps and supinator previs. All of these movements are given in a quick, jerky manner, bringing a great strain on the individual sets of muscles, besides tending to separate the bones at the outer part of the elbow-joint, this being prevented by the biceps, supinator longus, and extensor carpi radialis longior.

The symptoms produced by this affection are soreness, tenderness, myalgia, and severe continuous sickening pains, due to involvement of the bone. It is, of course, only in the long standing cases that there is an involvement of the bone.

The treatment should be prophylactic, and the pitcher should each day practise in the sun. Liniments, massage and rubbing are all useless. Heat is the best application, with elevation of the limbs. This will often relieve the pain in these cases. The main point in treatment is regular exercise, and not rest.—*Boston Med. & Surg. Jour.*

HYDROCEPHALUS.—Dr. James F. Goodhart, of London, in a paper on hydrocephalus in the *Archives of Pediatrics*, January, 1888, gives the causes of this affection as: 1. Cerebellar tumors (including tentorium and pons). 2. Chronic inflammation and adhesions at the base of the brain between the medulla and the cerebellum. 3. Congenital malformations. These, he says, no doubt act in one of two ways; there may be pressure upon the veins of Galen and the straight sinus, or there may be closure of the communication between the interior of the ventricles and the rest of the subarachnoid space. It might be thought that the pressure upon the veins, and the obstacle thus produced to the return of the blood from the choroid plexuses, would be a sufficient and readier explanation of all cases; but it seems clear from the occasional occurrence of congenital malformations, or of post-congenital adhesion and blocking of the aqueduct of Sylvius, that the mere closure of the ventricles is sufficient for the production of the affection. The congenital malformation is rare. Dr. Taylor has had one such case, the Sylvian aqueduct being obliterated, and it does not appear at first sight quite clear that the mere closure of the communication between the ventricles and the extra-ventricular subarachnoid space should so alter the conditions of the blood-pressure that its equilibrium is destroyed and hydrocephalus results. But it can be shown, he thinks, that this result is probable. It seems to him true, that by the conversion of the ventricles into a closed cyst, the ball-tap action of the cerebro-spinal fluid is in great measure rendered inoperative.

The points of his paper are these: that many every-day occurrences of practice are called hydrocephalus which are not so, and for purposes of discussion this may be taken to include, for time is wanting for specific allusion to the subject, that hydrocephalus and rickets are not often associated, as is very commonly asserted; that hydrocephalus is an infrequent occurrence, due to one of two or three conditions of advanced and irremediable structural change. As regards the treatment, he is not very hopeful, but thinks the only treatments possible, are the old-fashioned ones of firm strapping, the rubbing in of mercurials in such cases as may seem to be of inflammatory origin, and tapping. Believing, as he does, that the consolidation of the bones is a bar to the occurrence of hydrocephalus, he does not believe that systematic support, recommended by Gölis, Trousseau, West and others, has often been carried out with sufficient patience, and is inclined to believe that in suitable cases, paracentesis is deserving of a wider range of practice than it has received. None of these things can, in the nature of the case, show a large percentage of successes. "But," he concludes, "this is not the only occasion on which it happens that 'if by *any* means I can save *some*' must be our guiding principle and aim."—*Compend. Med. Science.*

BEUTIFAUL CHEMICAL PREPARATION.—A snow white mass of Caffeine, the active principle of coffee, 200 pounds and of great value, is now on exhibition in the window of William R. Warner & Co., 1228 Market Street. This beautiful crystalization represents ten tons of coffee, and is used as an ingredient in the preparation of Bromo Soda prescribed for the cure of headaches, migraine, nervousness, sea sickness, &c.—*Philadelphia Inquirer.*

THE LOVES OF THE BACILLI, is the title of the following verses, by H. S. C., quoted by the *Lancet* from the *St. James Gazette.*

Quoth Bacillus to Bacilla
(Surely everything has sex):
"It is quite enough to fill a
Soul with pride, to see the necks
Of these mighty men of Science
O'er the microscope bent low,
While beneath them in defiance
Spins the merry Vibrio.

"Proud am I to think, my Comma,
While the world rolls on its way,
Every fell disease springs from a
Fairy filament, they say.
Autocrats that tower Titanic
Have been known to bow to me;
Mighty potentates in panic
Disinfect at thought of thee.

"Rash would he be who should presage
That no germs behind us are;
We are part of that great message
Which outrings 'twixt earth and star.
What by thousands or by tens is
Multiplied, in vain they show;
Something lies beyond his lenses
Mortal man may never know!

"We are greater, my Bacilla,
Than all monarchs; for meseems
We need but exist to fill a
Strong man's brain with fever-dreams.
Such the thought my passion kindles,
O my microscopic bride:
Kiss me! although twenty Tyndalls
Have their eyes upon the slide!"

—*Weekly Med. Review.*

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AGENTS.—DAWSON BROS., Montreal; J. & A. MCMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

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THE LESLIE CASE.

Practitioners will have noticed with pleasure the reports in the daily press, showing that the plaintiffs in the celebrated case of Routh v. Leslie, lost their case entirely.

Dr. Leslie, of Hamilton, was called in May last to administer chloroform to Mr. Routh, who was to undergo an operation for hæmorrhoids. The man died on the table, and after a considerable interval, his widow brought an action for damages against Dr. Leslie. At the first trial the jury disagreed, but at the last trial held last March, they brought in a verdict favorable to Dr. Leslie on all the counts.

The evidence all went to show that Dr. Leslie, who is an old practitioner, had exercised the most scrupulous care in the administration of the anæsthetic; more care, we venture to say, than is usually thought necessary. Amyl nitrite was provided, as also forceps for dragging forward the tongue, and every conceivable precaution was taken to prevent untoward result, and to meet any possible emergency which might arise; the drug was given slowly and with the skill and care which years of experience had taught the administrator, and yet the man died while under the influence of the anæsthetic.

Law firms ever since the days of the celebrated case of Bardel v. Pickwick, have been found willing to undertake the defence of widows on spec. It is rather an anomalous thing, however, that counsel for the plaintiff in the case should have been so closely connected with the solicitor for the Ontario Medical Council, and should have used all his genius to get damages against a reputable practitioner, in a case that, even the evidence of the plaintiff's witnesses, showed quite clearly was a manufactured one. How it may appear to the medical mind at large of course we cannot undertake to say, but it seems to us that better taste would have been shown by the learned counsel from Toronto, in this case, had he passed the business over to some of his professional friends.

It is one of the anomalies of the nineteenth century that a jury, that "palladium of the people's liberties," composed of twelve men, honest and true, but totally incapable of forming a correct estimate of purely scientific and technical questions, such, for instance, as the action of chloroform upon the nerve centres, should have in their hands the assessment of damages in such technical and scientific cases.

It was a matter of street report that one of the jurors, a worthy farmer, whose knowledge of the functions of the medulla is no doubt limited, was heard to remark that he thought Dr. Leslie had exercised due care, etc., but that "Mrs. Routh was a widow" and should have some damages, because if it had not been for the doctors her husband might still have been living, and, besides, "it would learn the other doctors a lesson." To place in the hands of such men the power to mar a professional gentleman's reputation, and rob him of his property, is, we submit, one of the crying evils of the present day.

It will be remembered that a scheme was suggested by Dr. Henderson, of Kingston, at the last meeting of the Ontario Medical Association, for the formation of a Mutual Protection Fund, to enable medical men to defend themselves against unjust action for malpraxis; we hope to hear more of the elaboration of the scheme at the next meeting of the Association in June of this year. The idea is a good one and deserving of all support. Many a young man in Dr. Leslie's case might have been ruined, by not having the necessary means to employ counsel and carry on the defence in a proper manner.

It will not be out of place to refer to the absurdly low fees charged by some members of the

profession for giving an anæsthetic. It is stated that *two dollars* is a common fee for giving chloroform for the extraction of teeth. Every time chloroform is given a slight risk is incurred of unpleasant circumstances arising, which may seriously damage the administrator, not only in reputation but in pocket, and yet men appear to be willing to incur that risk habitually for *two dollars*, chloroform and professional skill thrown in. This is not as it should be, but the race is keen, and struggling young physicians, especially in cities, are prepared to take some risk for two dollars. No excuse, however, can be found for old and wealthy members of the profession who constantly cheapen their work.

We congratulate Dr. Leslie on his being able to completely refute the charges of carelessness brought against him, and in this we are sure we but voice the sentiment of the profession at large. His totally undeserved troubles should point a moral for all of us, and teach us to give anæsthetics always as though a suit for malpractice was sure to follow.

METHOD OF EXECUTION OF CRIMINALS.

The State Commission appointed by the Legislature of New York about a year ago, to investigate and make a report upon the most humane and practical method of carrying into effect the sentence of death in capital cases has lately completed its work. The president of the Commission was Mr. Gerry, President of the Society for the Prevention of Cruelty to Children, than whom, perhaps, no abler man could have been chosen for the office. The work of the Commission seems to have been thoroughly performed, this report constituting a pamphlet of about 100 pages, and showing that in civilized countries there exist only five different forms of execution, viz.: the sword, the guillotine, the gallows, the musket and the axe, in the order of frequency as here placed.

Regarding the deterrent effect of severity in the operation of the law for capital offences, there seems to be a pretty general agreement of opinion that it is almost *nil*, and therefore, to obviate the objections raised by sensitive and humane persons against the methods as in vogue, as also against all capital punishment, the Commission is of opinion that the death sentence should be carried out in the most painless manner possible. The American method of hanging is characterized as cruel, uncertain, liable to miscarriage from mechanical bungling, as also leading frequently to distressing and harrowing scenes from unskilfulness on the part of the executioner. Resuscitation is also possible, and the public sentiment is also strongly against the hanging of women. All the other methods enumerated are open to similar serious objections, and the Commission believes that if instantaneous and painless death could be assured, none of the old stock objections to capital punishment, on the ground of cruelty, could be urged with any force whatever.

The treatment recommended by the Commission is electricity. The report says: "Death, as a result, is instantaneous upon its application. It is the duty of society to utilise for its benefit the advantages and facilities which science has uncovered to its view. An electric shock, of sufficient force to produce death, cannot produce a sensation which can be recognised. The velocity of the electric current is so great that the brain is paralysed."

Professor Thompson, of Lynn, Mass., in replying to a communication from the Commission, says: "The most certain way to produce death would be to pass the current down the spinal cord from the crown of the head, as by the sudden application of wet surfaces or sponges. The result would be, I think, with a sufficiently strong current, of the proper character, a painless extinction of all the faculties; and the current being kept on for a little time would result in such complete nervous exhaustion as to forbid any possibility of resuscitation by any means whatever."

A number of experiments performed upon dogs and witnessed by the Commission, enabled them to come to the following conclusions: 1. That death produced by a sufficiently powerful current is more rapid and humane than that produced by any agent at our command. 2. That resuscitation, after the passage of such a current through the body and functional centres of the brain, is impossible. 3. That the apparatus to be used should be arranged to permit the current to pass through the centres of function and intelligence in the brain.

The necessary arrangements for the practical working of the scheme are outlined. The cost would be very small, as it is suggested that for the

whole Union there be but three places of execution. The treatment of the criminal, after sentence has been passed upon him, is of much importance. He should be kept in solitary confinement, and executed, *without publicity*, on a day not less than four, nor more than eight weeks after passing of the sentence. The body should be given over to the authorities for dissection or destruction, and on no account (if given to the family), should it be allowed to be exhibited. The dramatic death of many hardened criminals, the elaborate newspaper reports, and general public excitement attending many of the executions as carried on under the present system, are believed to lessen the horrors of the death penalty. It is suggested that the present laws be so amended that the new method may go into operation by January 1, 1889.

ONTARIO MEDICAL COUNCIL.

We may be permitted to express our pleasure at the determination which the Medical Council of Ontario has shown in maintaining the standing of the profession. At the recent examination, it refused to admit to the final examination any one who had not completed and shown certificates of attendance upon four regular winter sessions in the study of medicine. Hitherto the Medical Council was debarred from such action, as it was possible for any one, after having obtained a degree from a Canadian university, to proceed to Europe, where he could obtain a license to practise in Ontario, or any where else in the Dominion of Canada. Now this has been done away with and the Medical Council very wisely demands from all candidates for final examination four regular winter sessions.

Anyone who is familiar with the state of things some fifteen years ago, before the Medical Council of Ontario was in existence, and with the present condition of the profession, can easily recognize the great benefit which has arisen from the efforts of the Council, and there is no doubt but that body has the support and confidence of every right-minded member of the profession throughout the Province, in its endeavors to carry out its project of maintaining the interests of medical science. The preliminary examination of today is higher than that demanded by most of the licensing bodies of Europe, and the professional examinations are as carefully conducted and as practical as can well be made. We are not unmindful of the necessity of regulating the demand in any professional course, in some degree, by the wealth and resources of the country, and it cannot but be a good thing to encourage the study of medicine; at the same time it is very necessary that those having the great responsibility of treating the sick should be well qualified to do so; and, for our part, we are of the opinion that anyone engaging in the study of medicine will find in it sufficient to occupy his entire time, and can see no reason why four sessions of *six months each* should be thought sufficient; we would be inclined to go further and add a summer session of three months, one or two of which, at least, should be imperative during the four years of study. We are well aware of the advantages gained, by the apprentice, in the office of his preceptor, and we would not wish that the student be denied that experience; it is as essential for him to see, as far as possible, private as well as hospital practice, but we are decidedly of the opinion a summer course might, with advantage to the student, be demanded, and have no doubt the wisdom of the Medical Council of Ontario will work in that direction. We congratulate the medical profession of Ontario in the possession of a medical parliament whose determinations are to the advancement of the profession, and in whose hands we can so safely leave our interests.

ONTARIO MEDICAL ASSOCIATION.

The next meeting of this rapidly growing body will be held in the theatre of the Normal School, Toronto, on the second Wednesday and Thursday in June. If we may judge from the past, the coming meeting will be full of interest and productive of great advantage to the profession. It is certain that no Medical Association in the Dominion has done better work than this one. The numbers in attendance last year, both of Canadians and Americans, were greater than ever before, and we have good reason to believe that the next session will be even better than any of its predecessors. We shall be able to give more definite information in our June issue, but the arrangements already made are sufficient to warrant us in saying that every medical man in the

country may attend with great profit. Some Americans have been invited from New York and from Kentucky.

The following gentlemen have been appointed to open and continue the discussions :

In Medicine.—Dr. Mullin, Hamilton, selects the subject and opens, followed by Drs. Barrick and Geikie of Toronto ; Digby, Brantford ; Waters, Cobourg ; Kaines, St. Thomas ; and Forbes, Beachburg.

In Surgery.—Dr. Grassett selects the subject and opens, followed by Drs. Sullivan, Kingston ; Harris, Brantford ; McFarlane, Toronto ; Groves, Fergus ; Burt, Paris ; and Dupuis, Kingston.

In Obstetrics.—Dr. Powell, Ottawa, selects subject and opens, followed by Henwood, Brantford ; Ogden and Macdonald, Toronto ; Fenwick, Kingston ; and Hunt. Clarksburg.

The following gentlemen have been named to discuss the subjects opposite their respective names:

Dr. Daniel Clark, on some functional disorders of the nervous system of frequent occurrence in general practice.

Dr. J. H. Richardson, on any medico-legal subject.

Dr. Temple, on the use and abuse of pessaries.

Dr. Sheard, on the Pathological changes in the blood or tissues wrought by bacteria.

Dr. Oldright, on the sections and sutures in bullet wounds of the intestines.

Advisory Committee, the members of which, members of the Association may consult in cases of unjust suits against them for mal-practice :

Dr. Thorburn, Toronto, Chairman ; Drs. Moore, Brockville ; Sullivan and Henderson, Kingston ; Day, Trenton ; Richardson and White, Toronto ; Malloch, Hamilton; Harrison, Selkirk; Eccles, London ; and Taylor, Goderich.

SUBSCRIBERS TO THE LESLIE TRIAL FUND IN HAMILTON.

We, the undersigned medical practitioners, believing that the evidence brought forward in the recent trial, and the verdict of the jury, show that Dr. Leslie was subjected to an unjust prosecution, hereby subscribe the sums opposite to our names to assist in paying the expenses incurred.

Hamilton, April 5th, 1888.

Henry T. Ridley, $20 ; Geo. L. Mackelcan, $20 ; John A. Mullin, $20 ; Wm. Geddes Star $20 ; James White, $20 ; Herbert S. Griffin, $2 J. W. Rosebrugh, $20 ; Thos. Miller, $20 ; W Philps, $20 ; E. H. Gaviller, $20 ; J. H. Wilso $20 ; G. E. Husband, $20 ; E. H. Dillaboug $20 ; A. Woolverton, $10 ; G. M. Shaw, $1 A. C. Reid, $10 ; J. Lafferty, $10 ; R. N. Walla $10 ; C. S. Bingham, $10 ; E. Verum, $10 ; E. Mallock, $10; Jas. Russell, $10; T. W. Burge $5 ; T. W. Reynolds, $5 ; J. Ryall, $5 ; L. Cockburn, $5 ; D. G. Storms, $5 ; T. W. M Connachee, $5 ; E. P. Hillyer, $5 ; T. W. Bigg $5 ; Jas. Anderson, $5 ; Drs. Anderson and Bat $10.

We are heartily in accord with the spirit whi prompted the brethren in Hamilton to aid L Leslie in paying the expenses of the late suit. W understand that his expenses will amount to abo one thousand dollars, and, as is usual in such cas the plaintiff has no means, so that the burden paying his own costs will fall entirely upon t defendant. It is stated also that Dr. Leslie cou have made a compromise for a comparatively sm sum, thus saving money, time and worry. H however, felt that he could not conscientiou enter into any such agreement. The profession large is indebted to him for thus bravely carryi the case through to ultimate victory.

We think, therefore, that members of the p fession generally should, by their contributio assist Dr. Leslie in bearing the heavy expen connected with the two trials. Such a course w have a good effect in two ways—it will gi courage to those who are unjustly accused, a it will demonstrate to the public that the prof sion will not allow one of its members to persecuted without giving him brotherly aid.

A committee has been appointed, for Toron for the furtherance of this object, consisting Drs. J. E. Graham, R. B. Nevitt, P. H. Bry and J. L. Davison, to any of whom contributio may be sent. Dr. James White, who is t receiver for Hamilton, will also receive contri tions to this fund.

TRINITY UNIVERSITY, TORONTO, M.D.C.M.

Nelles Scholarship, $100, L. F. Cline.

L. F. Cline, J. S. Wardlaw, P. McLaughl J. Baird, J. P. Ogden, H. Becker, J. A. Neff, F. Tufford, W. R. Wade, W. H. Harris, F. Thompson, R. E. Walker, D. M. Campbell, A.

Hotson, W. E. Harding, J. B. H. McClinton, Jas. Crawford, D. C. Meyers, G. H. Bowlby, J. H. C. F. Fisher, T. J. Jamieson—*Certificates of Honor.*

C. H. Hamilton, A. T. Emerson, C. J. W. Karn, A. W. McCordick, J. C. Connell, L. G. McKibbin, W. T. Campeau, M. Steele, F. P. Cowan, H. A. Minchin, R. A. E. Burns, C. James, A. J. Macaulay, E. S. Jackson, B. Lammiman, E. R. Bishop, F. F. Ferguson, Miss S. Carson, F. H. Kalbfleisch, J. F. Palling, J. A. Howitt, P. McNaughton, W. P. Chisholm—*First Class Honors.*

Miss M. McKay, T. P. McCullough, C. N. Anderson, J. M. Eaton, W. J. Maxwell, H. J. Meiklejohn, W. H. Merritt, J. W. O. Marling, W. L. Bain, J. Brown, J. W. Rowand, L. Auld, C. H. Trancy, M. G. Millman, J. P. Roger, R. J. Wade, A. E. Ardagh, W. H. Cooke, W. H. Jeffs, R. U. Topp, H. B. Thomson, D. E. Jones, R. E. Towle, T. O'Neil, R. P. Robinson, R. J. Macdonald, F. J. Bateman, D. O'Gorman, Miss C. Hone—*Second Class Honors.*

D. McK. Smellie, L. J. Hixson, E. C. McArthur, J. A. Fitzgerald, J. Henry McFaul, H. C. S. Elliott, J. B. Fraser, D. Jamieson, T. A. Wright, Wilton Pratt, A. H. Garratt, E. H. Horsey, T. C. Baker, J. H. Lowe, G. B. Carbert, J. D. Deacon, E. H. Greene, D. A. Kidd.

Primary—J. S. Harris, A. Ross, J. W. S. McCullough, J. R. Macdonald, F. R. Clarke, A. J. Niddery, A. J. Murchison, S. W. Allingham, F. W. Penhall, H. J. Cummings, W Reid, R. W. Rooney, C. B. Oliver, J. M. Sifton, R. Hill—*Certificates of Honor.*

E. J. Boyes, H. W. Walch, F. A. Drake, E. S. Rice, C. McCue, W. H. Alexander, A. H. Speers, H. T. Arnall, T. B. Richardson—*First Class Honors.*

M. Ferguson, R. M. Hillary, T. McEdwards, R. L. Orton, W. J. Fletcher, E. H. Webster, A. M. Spence, O. E. McCarty, W. F. H. Newberry, G. Hargreaves, J. C. McGillivray, J. F. Dolan, G. M. Harrison, Miss M. L. Agar, Mrs. J. E. Lynd, W. D. Springer, J. A. Dinwoody, F. Preiss, E. R. Morton, J. J. Gee, J. A. McGregor, L. E. Morgan, J. F. B. Rogers, W. A. Sargent, J. C. Bell, J. A. Ghent, Miss S. P. Boyle, C. W. Morey, J. F. Wren, W. Wight, J. W. Cunningham—*Second Class Honors.*

R. F. Hay, A. C. Beatty, W. A. Jones, Miss M. Hutton, D. K. McQueen, F. J. Ewing, C. B. Coughlin, D. McLeod, M. C. Black, W. S. Ward, J. Honsberger, J. B. Guthrie, R. McGee, W. A. Thompson, P. Drummond, J. D. Berry, J. A. Mills, E. T. Boyes, H. E. Strathey, A. H. Garratt, D. E. Jones, F. H. Kalbfleisch, J F. McCormack, T. S. McGillivray, D. D. O'Gorman.

TRINITY MEDICAL COLLEGE.—*Fellowship Degree*—W. R. Wade, *Gold Medal;* L. F. Cline, *First Silver Medal:* Jas. S. Wardlaw, *Second Silver Medal.*

Wade, W. R., Cline, L. F., Wardlaw, J. S., Bowlby, G. H., Fisher, J. H. C. F., Neff, J. A., Meyers, D. C., Campbell, D. M., Crawford, Jas. —*Certificates of Honor.*

Anderson, C. N., Ardagh, A. E., Baird, J., Burns, R. A. E., Bishop, E. R., Campbell, Jos., Cowan, F. P., Emmerson, A. T., Ferguson, F. F., Howitt, J, A., Harding, W. E., Hotson, A. N., Hamilton, C. H., Jones, D. E., James, C., Jeffs, W. H., Kalbfleisch, F. H., Karn, C. J., Lammiman, B., McClinton, J. B. H., McCordick, A. W., McNaughton, P., McDonald, R. J., Marling, J. H. O., Merritt, W. H., Minchin, H. A., Ogden, J. P., Palling, J. F., Rowan, J W., Steele, M., Thompson, F. G., Topp, R. U., Walker, R. E., Wade, R. J.—*First Class Honors.*

Ellicot, H. C. S., Fitzgerald, T. A., Garratt, A., Hixson, L. J., Meiklejohn, H. J., Millman, M. G., Rogers, J. L., Thomson, H. B., McFaul, J. Henry —*Second Class Honors.*

Primary—Harris, S. S., McCullough, J. W. S., Macdonald, J. R., Clarke, F. R., Niddery, R. J., Murchison, A. J., Allingham, L. W., Penhall, F. W., Sifton, J. M., Oliver, C. B., Hill, R.—*Certificates of Honor.*

Boyes, E. J., Drake, F. A., Alexander, W. J., Speers, A. H., Arnall, H. T., Richardson, B. F.—*First Class Honors.*

Hilary, R. M., Fletcher, W. J., McCarty, O E., McEdwards, T., Newberry, W. F. H., Hargreaves, G., Dolan, J. F., Harrison, G. M., Dinmoody, J. W., Preiss, F., Morton, E. R., Gee, J. J., McGregor, J. A., Morgan, L. E., Rogers, J. F. B., Sargent, W. A., Cunningham, J. W.—*Second Class Honors.*

Berry, J. D., Beatty, A. C., Boyes, E. T., Cummings, H. J., Ewing, F. J., Honsberger, J., Hay, R. T., Jones, W. A., Mills, J. A., McGee, R., Strathy, H. E., Thomson, W. A.

Scholarships:—First Year—James Sutherland, 1st Scholorship, $50; Robert Knechtel, 2nd Scholarship, $30; C. C. Fairchild, 3rd Scholarship, $20. *Second Year*—J. S. Harris, 1st Scholarship, $50; J. W. S. McCullough, 2nd Scholarship, $30.

Special Prizes—The Special Prize for the highest in Physiology of the First Year, Jas. Sutherland, value $25. The "Dr. John Fulton Memorial Prize" for the highest standing in Surgery, where the student has spent *four* complete Winter Sessions at the College, D. C. Meyers, value $50. Special Prize given by "Trinity Medical College" for very high standing in the *recent Primary Examinations at Trinity University*, A. Ross, value $30.

QUEEN'S UNIVERSITY.—The following list com-

prises the names of the successful candidates at the recent M D.C.M. examinations at Kingston: —*Gold Medalist*, W. H. Downing; *Silver Medalist*, E. McGrath. T. C Baker, W. P. Chamberlain, J. C. Connell, M.A., W. H. Cooke, Miss A. G. Crane, Miss Elizabeth Embury, J. B. Fraser, A. R. Gillis, E. H. Horsey, D. Jamieson, T. J. Jamieson, F. H. Koyle, Miss Annie Lawyer, J. S. Livingstone, C. O. Mabee, C. N. Mallory, W. J. Maxwell, E. S. Mitchell, S. H. McCammon, T. S. McGillivray, Miss Nettie Ogilvie, T. O'Neil, W. F. Pratt, Wilton Pratt, J. W. Robertson, R. P. Robinson, P. K. Scott, D. McK. Smellie, A. D. Walker, A. W. Whitney, T. A. Wright, Rev. J. F. Smith, Francis J. Bateman, William E. Harding, Kenneth Henderson, Chas. James, Frederick H. Kalbfleisch, Thomas P. McCullough, Hiram B. Thompson, Wm. B. Wade, James S. Wardlaw. John Duff and M. E. McGrath get the Surgeonries of the General Hospital, and O. L. Kilborne and A. Gandier, College Demonstrators of Anatomy.

WOMEN'S MEDICAL COLLEGE, KINGSTON.—Miss Mitchell, of Montreal, and Miss Craine, of Smith's Falls, who graduate from the Women's Medical College this year, were equal for the honour of the Kingston Scholarship of $60. It will be divided. Miss Isabella McConville, of Kingston, carried off the Trout Scholarship of $50.

THERAPEUTICS WITHOUT ALCOHOL.—The question of the necessity for the use of alcohol in medicine may be considered as being nearly set at rest, yet there are a few practitioners who believe it can be safely omitted from the list of therapeutic agents. In this connection the following from the *Br. Med. Jour.* will be interesting to our readers :—"The Temperance Hospital has been in existence now about twelve years, and the annual report for 1886-7 may be studied with advantage in order to compare the results with those of other hospitals. It must not be supposed that the hospital only receives abstainers, though these are in the majority, probably due to the large proportion of infants and children. In the surgical department the results have been very satisfactory, so far as one is enabled to judge from mere figures, but turning to the medical cases, we may restrict examination to one or two groups of disease with advantage. Out of the thirteen cases of acute pneumonia four (abstainers) died, one of them on the fifty-fourth day from exhaustion. Only four cases of typhoid fever were admitted in all, and although the cases were of young people—15, 7, 14, and 32, respectively—and comprised three abstainers, they all proved fatal. The treatment was the same as elsewhere, and the only difference consisted in the non-exhibition of alcohol. Then again, simple exhaustion, eighty-seven days after the onset of the disease, proved fatal in one instance. The average stay of patients in the hospital would seem to show that convalescence is unduly prolonged, and this notwithstanding the fact that the list of cases comprises several of "nasal catarrh" and other trivial complaints. The only occasion on which alcohol was administered was in a case of operation for strangulated hernia, in which death resulted from an unreduced constriction. Every credit is due to the registrar, Mr. Leopold Hudson, for the clear and practical manner in which he has tabulated and arranged his figures. We shall look forward with interest to future reports drawn upon the same excellent plan, as it is only by comparing results that medical men will be enabled to judge the merits of treatment without alcohol. Thanks to the impartial summary with which the report opens, it is easy to grasp its general tenor. It constitutes an innovation which other hospitals would do well to copy.

CARELESS USE OF ANTIPYRIN.—The general use of antipyrin, indulged in by the laity, without medical supervision, calls forth the following timely warning from the *Lancet*. "The public attention given to the latest remedy for sea-sickness and many other affections which flesh is heir to, has its percentage of evil as well as good. Every medicament is not an unmixed advantage, and to suppose that antipyrin may be taken recklessly, any more than chloral, is to adopt a position of a dangerous kind. Antipyrin has on several occasions been administered with unexpected results. It is a drug which has undoubtedly powerful effects on the nervous system, especially as tending to produce a lowering action. We must strongly protest against its indiscriminate employment without the supervision of a medical man."

NEW METHOD OF REDUCING DISLOCATION OF THE SHOULDER.—Dr. Abril, *Lond. Med. Rec.*, inverts the usual proceeding for reduction of dislocation of the shoulder, viz., by fixing the humerus and causing the glenoid cavity to descend upon its head. This he accomplishes in the following way.

"He makes the patient stand with a crutch in his axilla; he then holds the hand of the affected side, making slight traction downward; the patient is now to let himself down as if he were going to fall on his knees, and as he falls the head of the humerus glides into its normal position, and the patient is surprised at finding himself cured." The pain is so trifling that no anæsthetic is required.

THE CANCER BACILLUS.—The *Lancet* thus sums up what the rival experimenters have to say about the discovery of the cancer bacillus, which it says "threatens to have as many claimants as the authorship of Junius's Letters. In addition to Dr. Scheuerlen, who was the first before the public, two Italians announce themselves as having independently made the discovery — Dr. Barnabei, Professor of Clinical Medicine at Siena, and Dr. Sanarelli, a graduate and teacher of the same school. But, it seems, a compatriot of Scheuerlen is also in the field to claim priority in the discovery—Dr. Schill. France, too, not to be outdone, has her special claimant in Dr. Perin. And, finally, Brazil, in Dr. Domingos Freire, seeks to vindicate the honor of the discovery to the New World."

TWINS, ONE BLACK AND ONE WHITE.—Dr. Newton Hill, of Pickensville, Ala., sends to the *Med. and Surg. Rep.* the following report of a case: "A young negro girl, about eighteen years of age, gave birth to twins at seven months, one of which was as black as the *ace of spades*, and the other as white as any white child I ever saw. This girl has been engaged as nurse in a white family a part of a year, but she has associated with white and black. Both cords were attached to the same placenta. Is this merely a freak of nature, or is it possible that they have different fathers? I would like to have the opinion of some of the brethren."

A NEW ANTISEPTIC.—Creolin has been the subject of investigation by Fröhner (*Fortschr. der Med.*) He says it is a non-poisonous antiseptic and is preferable to carbolic acid. It exists as a syrupy liquid, soluble in water and in alcohol in all proportions. He has found it serviceable in the following conditions: (1) in scabies, (2) as an antiseptic (3-per-cent. solution), (3) in chronic non-parasitic eczemas, (4) as an inhalation in infectious bronchitis and broncho-pneumonia, (5) in infectious or zymotic gastric and intestinal catarrh, to be given internally in doses of one to two grammes (℥ xv to ℥ xxx) of a 1-per-cent. solution.

TREATMENT OF URÆMIA. — The following has been used with success by Rolland, (*Jour. de Méd*).

Ext. jaborandi (alcohol.),
Ext. scillæ,
Resin. jalap.,
Resin. scammon, . . . āā gr. ¾.

In pill form.

Four or five pills in twenty-four hours, with an exclusively milk diet, yielded good results.

FOR HOARSENESS AND CATARRHAL COUGHS.—The *Med. News* gives the following as a very useful preparation for the above:—Ammonium acetate, 3 parts; potassium bromide, 3 parts; tincture of belladonna, 1½ parts; tincture of aconite, 2 parts; infusion of balsam of tolu, 150 parts; syrup of balsam of tolu, 50 parts. A tablespoonful is to be taken every three or four hours.

VOMITING OF PREGNANCY.—It is stated, *West. Med. Rep.*, that a single vesication over the 4th and 5th dorsal vertebræ, "promptly and permanently relieves vomiting of pregnancy, no matter at what stage."

NEW ANATOMICAL DISCOVERY.—It is stated that Dr. Bryant, of Boston, has discovered that there are valves in the portal and mesenteric veins, during infant life, in seventy-five or eighty per cent. of cases. These disappear as the child grows.

PERSONAL.—DR. G. STERLING RYERSON, leaves May 1st for a professional trip to Germany, taking in the hospitals of New York, London and Paris, by the way. The Dr. intends studying new methods in the extraction of cataract, especially immature cataract. He intends to return about the middle of July.

Books and Pamphlets.

LOMB PRIZE ESSAYS. No. 1, Healthy homes and foods for the working classes; No. 2, The sanitary conditions and necessities of school-houses and school-life; No. 3, Disinfection and individual prophylxis against infectious diseases; No. 4, The preventable causes of disease, injury and death in American manufactories and work-

shops, and the best means and appliances for preventing and avoiding them. By. Drs. V. C. Vaughan, D. F. Lincoln, George M. Sternberg, and Mr. G. H. Ireland. Published by the American Health Association.

On a New Treatment of Chronic Metritis and especially of Endo-metritis with Intra-uterine Chemical Galvano Cauterizations. By Dr. Georges Apostoli. Translated by A. L. Smith, B. A., M. D. 1888. George S. Davis, Detroit, Mich.

Dr. Smith's translation is admirable. Our readers will remember an article by the translator which appeared in our Dec. No. on Electricity in Gynecology. The great interest which is taken in this method of treatment will render this little work of 113 pages very acceptable to the profession. The methods of the author are placed before the reader with precision and clearness.

We commend the book to those who are anxious to know what Apostoli and others are doing in this line of treatment, which, it would appear, has come to stay.

Diseases of the Heart. By Alonzo Clark, M. D., LL.D., Emeritus Professor of the Principles and Practice of Medicine, etc., College of Physicians and Surgeons, New York. One Octavo Volume, 251 pages. Price, $2.75. E. B. Treat, Publisher, 771 Broadway, New York.

This is the sixth volume of Treat's Medical Classics, and we think presents a better appearance than the former ones, which were not up to the mark as regards the printers' and binders' workmanship.

The information gathered in this volume embodies the substance of his teachings and lectures on "Diseases of the Heart" given to his students. Nothing is omitted which would tend to give a clear exposition of the views which he inculcated as teacher.

The volume cannot therefore fail of being of great value to practitioners, as it contains the results of a singularly calm and judicious mind of one who had long and pre-eminent experience, and whose ripened harvest of thought is gathered into this sheaf, which ought to find an honored place in the medical granary among other distinguished sheaves.

Ophthalmic Surgery. By Robert Brudenell Carter, F. R. C. S., Ophthalmic Surgeon to St. George's Hospital and to the National Hospital for the Paralyzed and Epileptic; and William Adams Frost, F. R. C. S, Assistant Ophthalmic Surgeon to the Royal Westminster Ophthalmic Hospital. Illustrated with a chromograph and ninety-one engravings. Philadelphia: Lea Brothers & Co.

This is a useful treatise on the eye, devoting its space principally to diagnosis and treatment. It deals with the ordinary injuries and diseased states of the eye, and embraces the newest and most practical methods of treatment of the day, and we are sure it is a work which will receive great patronage and be of great use to the profession.

A Practical Treatise on Diseases of the Skin. By James Nevins Hyde, A.M., M.D. Professor of Skin and Venereal Diseases, Rush Medical College, Chicago, and Physician for Diseases of Skin to the Presbyterian Hospital, Chicago. Second edition, enlarged. Philadelphia: Lea Brothers & Co.

This work is profusely illustrated and an able treatise of 676 pages. In it will be found treated every disease of the skin that the practitioner is ever likely to meet with, and its remarks on treatment are especially to be praised. The book is well written and a very readable and practical treatise.

Diseases of Man; Data of their Nomenclature, Classification and Genesis. By John W. S. Gouley, M. D., Surgeon to Bellevue Hospital. New York: J. H. Vail & Co. London: H. K. Lewis. 1888.

Prescription for Rachitis.—The following is from the *Progrès Médical*: Phosphorus gr. 1-6; oil of sweet almonds f ʒ viiss; gum arabic (powder) of each ʒ iii ¾; distilled water f ʒ xss. M.—Two or three teaspoonfuls in coffee, a day.—*Am. Med. Digest.*

Births, Marriages and Deaths.

At Brantford, April 3rd, E. E. King, M.D., of Toronto, to Isabella, daughter of J. Franklin Ott, Esq.

At Brockville, Ont., on the 18th April, Jacob Edwin Brouse, M.D., aged 48 years.

THE CANADA LANCET.

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Original Communications.

RAPID UTERINE DILATATION.*

BY A. F. ROGERS, M.D., L.R.C.S. ED., OTTAWA.

There are few minor operations in gynæcology which can show such good results and as widely applicable as that of rapidly dilating the cervical canal. The operation is far from being a panacea for all the ills produced by uterine disease, but in properly selected cases the benefits arising therefrom are prompt and decided. By this method, cases of stenosis can be cured more readily and with less danger than by the operation of incision, as advocated by the late Sir James Simpson, Dr. Robert Barnes and Dr. Marion Sims. Indeed, this operation has almost entirely superseded the latter on this side of the Atlantic, and this is not to be wondered at when we consider the anatomical peculiarities of the part involved, and the sources of danger in the operation of incision. Again, by this means we are frequently enabled to dispense with the tedious and somewhat dangerous method of dilating the cervix by means of tents, where it becomes necessary to make applications to the intra-uterine mucous membrane. We are all aware of the danger of intra-uterine injections, unless there is a perfect patency of the cervical canal, to allow the fluid to freely and rapidly escape, and the usual mode of accomplishing this has been by the expansion of tents. By means of rapid dilatation more perfect patency may be secured, without the tediousness and danger of dilatation by tents, and the nozzle of the syringe can be passed between the divergent blades of the dilator. I shall briefly describe the method of performing the operation and then state the various conditions to which it is applicable, and finally give the history of a few cases which I have treated by this means.

1. *The Operation.*—By far the best uterine dilator which we, as yet, possess, is Dr. William Goodell's modification of Ellinger's dilator. The great advantage of this instrument is that the blades open parallel to each other, and it is provided with a screw to retain the blades open when necessary. Dr. Sims and Dr. Atlee each devised an instrument for this purpose, but both lack the parallel expansion of the blades. To perform the operation of rapid dilatetion thoroughly, an anæsthetic should be given, although for partial or incomplete dilatation—such, for instance, as for using intra-uterine applications or injections—it is not always necessary. Having anæsthetized the patient, she is brought to the edge of the table or bed and each foot held by an assistant. A bivalve or duck-bill speculum is introduced, and the uterus steadied by a tenaculum or vulsellum. It is best now to pass a probe into the uterus for the purpose of ascertaining the size and direction of the canal. The dilator is then introduced and the handles pressed gradually together, and then held there for ten or fifteen minutes. The difficulty in the procedure is in the introduction of the dilator. To overcome this, it is recommended to use at first an Atlee dilator or a small size Goodell's Ellinger, and introduce it as far as it will go. Then, by stretching the part it occupies, the stricture or contraction above yields to a certain extent, allowing further introduction and dilatation, and so on until the entire cervical canal is dilated "or tunnelled out." That accomplished, the larger instrument should be used, inasmuch as the more perfect the dilatation the less the chances are of recurrent retraction. When the os is so small as not to permit the entrance of the point of the dilator, it is recommended by Goodell to produce enlargement by means of the closed blades of a pair of sharp-pointed scissors introduced with a boring motion. As a certain amount of pain and soreness is felt after the operation, a suppository of morphia or opium introduced into the rectum will be beneficial While the operation of rapid cervical dilatation is, perhaps, most conveniently performed as described, with the patient in the dorsal position, yet many gynæcologists operate exclusively with the patient

* Read at a meeting of the Rideau and Bathurst Medical Association.

on the left side, and for partial dilatation the latter position offers many advantages.

2. *Conditions to which the operation is applicable.*—(*a*) Dysmenorrhœa. This condition may be due to stenosis of the cervical canal, or flexion with stenosis, or flexion alone. It seems to me impossible to differentiate these conditions by subjective symptoms. It is generally stated that where stenosis exists alone, the pain is excessive before the flow and gradually ceases as it becomes thoroughly established; whereas in flexion the menses are discharged in gushes, caused by the pent-up fluid straightening out the canal. All subjective symptoms are unreliable, simply because the excessive pelvic and ovarian hyperæmia, consequent on the obstruction, tends to mask the naturally concomitant symptoms of either stenosis alone, or when combined with flexion. Where obstruction exists the vaginal portion of the uterus usually becomes elongated and pointed, with, sometimes, the os externum exceedingly small. Likewise, the fundus becomes enlarged, and the sound frequently gives a measurement of three or three and a half inches. In stenosis, Dr. Barnes says, the seat of obstruction is generally at the os externum, and where obstruction exists at the os internum, it is due to flattening of the walls by flexion. Whether this be true or not as a rule, rapid dilatation of the cervix will rectify the flexion and cure the stenosis at the same time, when these conditions are found to exist together. The consequences of obstruction are thus given by Barnes: "(1) Congestion and enlargement of the body of the uterus, disposing to menorrhagia, and causing uterine spasm and colic. (2) A similar condition of the fallopian tubes. (3) Congestion, enlargement and inflammation of the ovaries. . . . (4) As an ulterior result continued obstruction may entail, through the action of inflammation or long interference with function, atrophy of the ovaries and extinction of the menstrual phenomena." When we consider the consequences which must ensue from the long continued congestion of the uterus, fallopian tubes and ovaries, and when we consider the fearful suffering entailed on those in whom obstruction exists, we cannot magnify too highly any means calculated to afford relief. To overcome the condition of stenosis the operation of incision of the cervix was devised, and to accomplish this, various cutting instruments have been invented. Simpson's and Greenhalgh's metrotomes and Küchenmeister's scissors, with others of the same kind, have been and are still used. The results, however, from the cutting operation are not nearly so successful as those from rapid cervical dilatation.

(*b*) Sterility. Where sterility is due to stenosis or anteflexion, then this operation will frequently bring about a cure. Marriage, as a rule, increases the dysmenorrhœa arising from obstruction, and often this symptom is developed after marriage in women who did not suffer from it previously. On examination the fundus will often be found pressing on the bladder, and it will be almost impossible to introduce a probe on account of the flexion. In such a case, rapid dilatation will not only widen out the cervical canal and thereby facilitate fecundation, but it will straighten the flexion, and, in consequence, overcome the obstruction to pregnancy. Where obstruction has existed for years it cannot be wondered at that the general disorganization in the lining membrane of the uterus, fallopian tubes, and in the ovaries, resulting from the prolonged hyperæmia, renders fecundation doubtful, even after the first cause has been removed. If the operation cures the dysmenorrhœa, however, and allows a free flow for the menstrual fluid, and if the operation is repeated if contraction occurs, there is every reason to hope that time will rectify the other conditions and fertility will ensue. Fortunately statistics show that pregnancy frequently occurs soon after the obstruction has been removed.

(*c*) Intra-uterine Medication, etc. Frequently it is necessary to make a digital examination of the interior of the uterus, and this operation renders easy what is a difficult proceeding where dilatation is produced by tents. Again, in cases of menorrhagia suggesting a growth springing from the interior of the uterus, the operation of rapidly dilating the cervical canal not only gives a means of diagnosis, but if a polypus is discovered materially facilitates its removal. Generally in cases of menorrhagia the laxity of the tissues of the cervix, resulting from the depletion, renders easy the operation of dilatation, and usually the physician can dilate the cervix and remove the polypus, if present, at one operation, contrasting favorably with the long, tedious waiting of dilatation by tents. Lastly, for using the currette an

for intra-uterine applications and injections, this operation offers many advantages over any other means of dilatation.

In regard to the *after-treatment*, a hot water injection should be used immediately after the operation, and this should be employed, also, two or three times a day for a few days. It is advisable, likewise, for the patient to remain in bed for three or four days. If a proper time has been selected to perform the operation, viz., within a few days after menstruation, the danger of hæmorrhage is exceedingly small, much less at any rate than after the cutting operation, and the danger of inflammation is not so great as after using relays of tents.

3. *Clinical Cases.*—I shall now give a brief account of five cases, in whom I have operated by this method:

Case 1.—Mrs. M. came under my care July 6th, 1886, married for three years, never became pregnant; slight dysmenorrhœa previous to marriage, which had gradually increased until her suffering became intense, necessitating large doses of morphia at the periods to give relief. On examination, the cervix was found greatly hypertrophied and the fundus doubled forward, pressing on the bladder. The cervical canal was small, and it was with difficulty a probe was passed, and gave a measurement of three inches. The case was plainly one of anteflexion, coupled with a narrow cervical canal. The operation of rapid dilatation was performed under chloroform. No bad symptom arose after the operation, although she was kept in bed four days and hot water injections used. In this case the dilatation was thoroughly performed and the flexion completely straightened. The time selected for the operation was three days after menstruation. The dysmenorrhœa was completely cured, and as she moved to the States shortly afterwards, I do not know whether pregnancy occurred or not.

Case 2.—Miss L., aged 27, came under my care Aug. 18th. For the past three years has suffered greatly from dysmenorrhœa, causing her to be fretful, nervous and irritable. She attributes the trouble to a severe drenching received in October, which caused an attack of inflammation of the lungs. At the time the wetting occurred she was menstruating, and the flow suddenly ceased. Before resorting to an examination, every known remedy in the shape of medicine was used with no effect whatever. In the presence of her mother she was placed under chloroform and an examination made. The cervix was long, narrow and pointed, and the os-externum so small that only a fine surgical probe could be passed, and showed the uterus to be over three inches in length. No flexion existed, but the fundus was enlarged and slightly retroverted. Atlee's dilator was first used and the full extent of dilatation by that instrument accomplished. Then the Goodell Ellinger dilator was used, and the handles slowly and gradually brought together and kept there ten minutes. After the operation the uterus was shortened and the conical condition obliterated. She was kept in bed for a week, and hot water injections used, and no symptom of inflammation arose. On the first occasion of menstruation after the operation she suffered considerably, but the pain became less and less at each period, and four months afterwards the dysmenorrhœa had ceased, the nervous system became stronger, irritability subsided, and she became strong, robust and healthy, and as such she has continued since.

Case 3.—Mrs. G., aged 22, married ten months, has not been pregnant; dysmenorrhœa began soon after marriage and it is increasing, frequent and painful micturition, bodily health fairly good. On examination, anteflexion and stenosis of cervical canal at internal os. Operation of rapid dilatation with Goodell's dilator, and the flexion straightened. In order to more thoroughly complete the latter, the instrument was withdrawn, carefully re-introduced and the blades opened opposite the flexion. The result was that the dysmenorrhœa ceased immediately, and pregnancy took place shortly after the operation.

Case 4.—Mrs. S., aged 31, married twelve years, no children and was never pregnant. Has always had dysmenorrhœa, the pain beginning several hours previous to the period and lasting a day or two after menstruation set in. Lately, excessive vesical irritability has arisen, the pain has increased and menorrhagia developed, the period lasting seven or eight days, and the quantity lost four times what was usual. From the condition reported, I suspected an intra-uterine polypus, and advised an examination. The uterus, on examination, was found very much hypertrophied, the fundus enlarged and retroverted, but there was no

flexion. On attempting to pass the sound the cervical canal was found narrowed, and at the os-internum complete stoppage occurred. With difficulty a fine probe was inserted. I freely dilated the cervix with the patient under chloroform, but found no evidence of a polypus. Clearly, the menorrhagia was due to hypertrophy consequent on the stenosis. The result was that the menorrhagia gradually ceased, and the dysmenorrhœa was very much relieved although pregnancy has not occurred.

Case 5.– Mrs. F., aged 28, married seventeen months, never has been pregnant; dysmenorrhœa severe, pain was present, slightly, previous to marriage. On examination there was found no flexion, but the cervical portion was elongated and the os-externum exceedingly small. The operation of rapid dilatation was performed with the patient under chloroform. The result was not satisfactory so far as the dysmenorrhœa was concerned, as it was only slightly relieved, but three months after the operation conception occurred.

As I have already hinted, this operation, while undoubtedly beneficial in suitable cases, should not receive excessive laudation, for fear of its being recklessly applied Perhaps in no branch of the science of medicine have so many unwarranted and unworthy medical and surgical procedures been adopted, in blind faith, as in the science of gynæcology. At one time everything was ulceration, and many a uterus was unnecessarily cauterized. Again, displacements became the pass word to gynæcological success, and inventors plied their ingenuity to discover the most perfect support. Thus, many able gynæcologists held that anteversion of the uterus was a pathological condition, and anteversion pessaries in abundance was the result. We all know, now, that the natural position of the uterus is the condition of anteversion, and any pessary applied to rectify the same, must of necessity increase the very condition which the version was claimed to cause—viz., vesical irritability. Likewise, the condition of anteflexion can only be said to be pathological when it produces dysmenorrhœa. Not long ago, Dr. Emmett, of New York, started the theory that in laceration of the cervix was to be found the true solution of so many of the obscure female diseases, and that in the operation of trachelorraphy was to be secured the long sought for panacea. How soon this faith became established and gynæcological literature teemed with its success. Recently, Prof. Nœggerath, of Wiesbaden, has thoroughly enquired into the subject, and entirely disproves almost every contention of Dr. Emmett and his followers. He shows that laceration of the uterus does not conduce to miscarriage and that it increases the chances of conception; that the position of the uterus is not affected by it; the axis is not elongated thereby, erosions, and ulcerations, and cervical disease are not a consequence, and eversion of the lips is never directly produced by it. Finally, he proves that laceration has no influence in producing uterine disease, either as regards frequency or intensity, and the restoration of the shape of the cervix can have no influence on the uterus. Thus another theory is exploded, and another discovery proved fallacious if Nœggerath's views be sustained. Undoubtedly grains of truth lie hidden in the chaff of all these statements and theories; time and patience, and earnest, honest investigation are needed to place the truth beyond the cavil of blind worshippers of any one doctrine. I take it that gynæcology, like ophthalmology and laryngology, requires particular knowledge and experience for an accurate diagnosis; but the nervous phenomena playing so prominent a part in the subjects of these diseases, must be well understood and carefully considered in order to avoid error.

NECROTIC TONSILLITIS.*

BY A. McPHEDRAN, M.B., TORONTO.

The name *diphtheria* always conveys to the lay mind so much dread, and justly so, that all cases of pseudo-diphtheria should, when possible to do so with certainty, be carefully distinguished to avoid giving needless alarm. The two following cases bear a certain resemblance to diphtheria but at the same time present unusual characters worthy of consideration.

Case 1. M T., aged five; a healthy child, of good family history. Her mother had large tonsils, which had to be removed. The child's tonsils were very large, almost meeting across the

* Read at the Toronto Medical Society, at the stated meeting, May 17th, 1888.

isthmus of the fauces. She was subject to frequent attacks of catarrhal sore throat. On November 26th, 1887, she became seriously ill, with a temp. of 103.5° and noisy, difficult respiration. On examining the throat, there was observed on the left tonsil a grayish, gelatinoid-looking, raised patch, about the size of a ten cent piece, intimately adherent to the tonsil and surrounded by deeply inflamed membrane. Swallowing was painful, the left cervical glands slightly enlarged. The appearance of the patch differed materially from the fawn-colored, tough-looking, opaque patch of diphtheria. Moreover, it was slightly marked in a stellate manner; the markings became more distinct later on. The patch separated *en masse* in four days, leaving a raw, ulcerated surface that healed with fairly distinct cicatricial contraction, reducing somewhat the size of the tonsil. Until the patch separated the temperature continued elevated, with thirst, loss of appetite and considerable prostration. The breath only slightly offensive. Convalescence was slightly protracted, but there were no paralytic symptoms Isolation though advised was very imperfectly carried out. None of the other members of the family, which consisted of the grandmother, parents and a younger child, contracted the disease.

Case 2 differs considerably from the foregoing. Mrs. M., aged 50; from the country, visiting a sister whom she was nursing in confinement. She was a delicate woman, whose throat often gave her trouble; both tonsils were chronically quite large. I saw her first on February 25th, 1888. She complained of pain in the left side of the throat, and the left tonsil was found, on examination, to be completely covered with a whitey-gray membrane, intimately adherent and surrounded by a dark-red ball on the pillars of the fauces. The membrane was quite thin in several places and it terminated in a thin margin. It could not be stripped off, and the removal of a small piece left a bleeding surface. The left cervical glands were slightly enlarged. Temp. slightly sub-normal (97.3°), pulse 120, weak, no appetite. She had been in the city only two days, and thought there was some white deposit on the tonsil before she left home. She was carefully isolated for a few days, as besides the infant there were two other children in the house. Iron with chlorate of potash was given freely, and as much nourishment as possible taken. Temperature rose to normal next day and remained so throughout; pulse continued about 120, and weak with general prostration. No change occurring in the membrane after a few days, a solution of argent. nitr. (℥ss. ad ℥j.) was applied three times a day with a brush. With this application the membrane gradually became thinner. By March 10th the whole surface was still covered with membrane. I next saw her about the 20th of March on her leaving for home. Most of the slough had separated, and had extended down into the tonsil to its base, dividing it into two unequal, wedge-shaped parts, the anterior about half the size of the posterior part. Between these the slough had not yet completely separated; of what remained the superficial was semi-liquid, and the deep shreddy a. d adherent. Nearly one-half of the tonsil had been destroyed. The general health had improved considerably; there was now no pain in the throat.

The term, necrotic tonsillitis, for such cases, is used by Strümpell in his Text Book of Medicine, and is the most appropriate available; they are scarcely severe enough to be called gangrenous, and the term phlegmonous is associated with the idea of a more acute inflammation. There can be no doubt as to the propriety of calling Case 2 one of necrotic tonsillitis, its appearance and course were typical of such a condition. Nor do I think Case 1 can be described as anything else, though the inflammation was here much more acute, separating the slough in a very short time. It, however, bears a strong resemblance to diphtheria, but that it was not a case of that disease I believe for the following reasons: It must be rare for so large a deposit accompanied by such sharp localized inflammation, to remain so circumscribed, the uvula and soft palate were not affected, though in contact with the deposit. I have never seen one run such a course; the cervical glands would almost certainly have been much more seriously involved in so severe a case of diphtheria; no paralytic symptoms followed; there was no evidence of contagion; the appearance of the slough and of the ulcer resulting differed from those of diphtheria. Nevertheless, while all this is true, the fact remains that many cases of diphtheria cannot be diagnosticated from such cases of necrotic tonsillitis, and it becomes

our imperative duty to exercise as much caution with them, in the way of isolation and treatment, as if we were sure they were cases of that dread disease. It is best to err on the safe side.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

THE EPILEPTIC PAROXYSM.

With the experiments on the cervical sympathetic and splanchnic nerves before us, how can we say that the anæmia, or rather ischæmia, of the brain, which ushers in the epileptic seizure, is due to "excessive action of the spinal centres," compelling the spasm or contraction of the arterial muscles on which this ischæmia depends? Have we not had proof that the arterioles contract best when their vaso-motor nerves are cut, or are paralyzed, or dead; and if so, are we not bound to hold that not excess but failure of nerve power is the proximate cause of the epileptic paroxysm? And is not the question of such excess or failure of nerve force a most practical one in determining the treatment?

How far in our comparative failure to cure this terrible disease due to our approaching it under the ægis of an erroneous theory—that nerve force here needed to be depressed rather than exalted? It is well for mankind that in this, as in some other instances, our practice has sometimes been directly at variance with the theory of the day. Thus we find Dr. Anstie assuring us that "our anti-spasmodics are stimulants"; and that "alcohol is one of the best remedies possible in the convulsions of teething in children" (*a*).

NO "MORBID" NERVE FORCE.

Spasms and convulsions frequently take place in the very act of dying, and under circumstances in which nerve force ought to be regarded as at a low ebb; as, for example, in uræmic blood poisoning. It is customary in some quarters to attribute these or other spasms to "a morbid irritability" or "a morbid nerve force"; as if the central nervous ganglia were capable of producing two kinds of nerve force, one normal and the other "morbid," and the spurious variety of attaining extraordinary power just in proportion to the complete failure of nerve force proper. A little reflection, I think, will show that this is untenable. Nerve force may be increased or diminished: its condition may be one of excess or of failure, but that it may present a duplicate of itself, and its *alter ego* produce effects, for which nerve force proper is inadequate, and yet is responsible, is surely yielding too much to the exigency of an erroneous theory.

Medical literature presents numerous examples of this appeal to a "morbid nerve action," and it is rather surprising to find such a writer as the late Dr. Anstie referring to "the explosive disturbances of nerve force which give rise to the convulsions of tetanus" as "something quite different in kind" from healthy nerve action (*b*). Now, if a nerve centre be thrown into action otherwise than by the exercise of its normal activity, then it is no longer the nerve centre which is acting, but a power extraneous to itself; a modern Archæus for which scientific medicine ought to have no place. And if tetanus be really due to an explosive activity of the nervous centres which are discharging nerve force with unwonted activity, surely to administer stimulants in such a case ought to be injurious, if not fatal! And yet we find that Dr. W. A. Hammond, of New York, has produced statistics in which "stimulants" stand at the very head of the list of curative agents in tetanus (*c*). Here again the theory of the day is surely out of joint with the clinical facts.

CHLOROFORM AND RELAXATION OF ANÆSTHESIA.

I have been asked how the rigidity, at first, and subsequently the relaxation, of the muscles during anæsthesia are to be accounted for in this theory. The answer is easy. The rigidity is due to the partial paralysis of motor nerve influence, setting the contractile power of the muscle free to act. This occurs at a comparatively early stage of the process. The relaxation which attends complete anæsthesia is due to the loss of contractile power

* Read before the Physiological Section of the Ninth International Medical Congress, held in Washington, September, 1887.

(*a*) Stim. and Narcot., pp. 123, 129.

(*b*) Neural., p. 8.

(*c*) Dis. Nerv. Syst., 4th Ed. p. 541.

on the part of the muscle, owing to the absence of oxygen in sufficient quantity in the blood; for chloroform tends to prevent the oxygenation of the blood (*a*), and renders it venous in character. In this way the chemical processes on which the generation of contractile force in the muscle depends are retarded. (*b*) Dr. M. Foster states that "blood is not only useless, but injurious, unless it be duly oxygenated." And again, "if venous blood be driven through a muscle the irritability of the muscle is lost even more rapidly than in the entire absence of blood" (*c*). This, I think, will be accepted as a satisfactory explanation, in strict accord with physiological facts. The relaxation, however, is not so great but that faradization of the muscle will induce a further degree of contraction; showing that the contractile energy of the muscle, though weakened, is not lost. That the contractile power of the muscle is thus lowered offers a bar to the prolonged or complete administration of chloroform during parturition, for obvious reasons.

The mode in which anæsthetics induce arterial contraction, as explained by Dr. Henry M. Lyman, may be quoted as follows:—"Chloroform acting through the blood upon the nervous apparatus in the walls of the vessels, tends to paralyze the sensory endings of the nervous fibrils. This means a diminution of the normal impulses, which should continually reach the central intraparietal ganglia," in consequence of which "the motor cells no longer experience the inhibitory influence which they should receive from the periphery of their territory, and a liberation of a motor impulse excites muscular contraction, and we have vascular spasm." etc., as the result (*d*). This, of course, is purely hypothetical. The motor nerve fibrils in the muscular bands are ignored altogether, while a purely imaginary "inhibitory" system is invoked to meet the exigency of the occasion. How much better to hold that the motor nerve fibrils also are more or less paralyzed, and the arterial muscle directly set free to contract; thus dispensing with the inhibitory apparatus altogether.

THE NERVE-MUSCLE PREPARATION.

It is impossible here to enter on a critical analysis of the experiments on nerve and muscle, which a careful examination will show to be wholly consistent with the views here advocated. When in a nerve-muscle preparation, the muscle is made to contract by applying to the nerve trunk the shock of electricity, the corrosion of a chemical agent as a quick stroke, what is there to show that the effect on the nerve is not to cause a temporary cessation of nerve influence, rather than the production of a stimulus? There is really nothing, and the character of the impulse is merely a matter of inference. Even in what is called the rheoscopic frog, where contraction in one muscle imparts an influence whereby another muscle is made to contract, the molecular or electrical wave may as well be paralyzing as stimulating.

THIS THEORY NOT NEW.

In hastening to conclude, let me state that, whether this theory of the antagonism of nerve and muscle be true or false, I am not entitled to the praise—or blame—of originating it. It was broached so long ago as 1832 by Dr. West, an English physician, and is said to have met with some countenance from Sir Charles Bell. Dr. C. B. Radcliffe, F.R.S., in his work on "Epilepsy, Paralysis and Pain" (p. 95), has warmly adopted the views of Dr. West, and offers some strong evidence in support of the proposition, that "there is reason to believe that ordinary muscular contraction is associated with a deprivation of nervous influence, and not with a contrary state of things." I have here endeavored to support the same thesis, but with evidence drawn from other sources.

(To be continued.)

(*a*) Ringer's Ther., p. 286.
(*b*) Lyman's Anæsthetics, p. 28; Bryant's Surgery, Amer. Ed., p. 318.
(*c*) Phys., pp. 883, 126. (*d*) Æsthesia, etc., p. 27.

THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

Aim.—This Association has been formed to provide a Reference Medical Library for the use of the profession throughout the Province. All engaged in original investigation or desirous of making contributions to medical literature, must have felt in the past the pressing need that existed for such a collection of books, which as occasion arose they could consult. Valuable libraries are frequently broken up under the hammer of the auctioneer, which should find a fitting resting place upon the shelves of this Institution, and not only confer a benefit upon

the profession at large, but serve as a lasting memorial to the physicians who laboriously collect them at great expense.

Organization.—By the concerted action of several bodies representing the profession in Ontario—*i.e.*, the Council of the College of Physicians and Surgeons, the Ontario Medical Association, and the Toronto Medical Society—a committee was appointed in 1887, whose members have secured incorporation under the above title, in compliance with the statute regulating library associations. This provisional board has elected interim officers, and is engaged in the preparation of a constitution and by-laws, which will be submitted to the first annual meeting.

Financial Position.—Stock-books having been opened, a canvass of the local profession was made, and upwards of $3,000 have so far been secured. The shares are placed at $5 each. The nominal capital is $10,000, all of which it is hoped will shortly be subscribed for.

Location.—The Council of the College of Physicians and Surgeons has shown its cordial and practical sympathy with the objects of the Association in placing at its disposal, at a nominal rent, a large and well-lighted room situated in its magnificent and commodious building, recently erected at the corner of Bay and Richmond Sts., Toronto. This room is on the first floor of the building, adjacent to the elevator, and hence easy of access at all times. It has been provided with shelving, also, and is steam-heated.

Annual Meeting.—The first annual meeting of shareholders will be held on Wednesday, the 13th of June, at five o'clock in the afternoon, in the library of the Normal School, during the session of the Ontario Medical Association, so as to give every member of the same an opportunity to be present.

Opening.—It is hoped that arrangements will be so far completed, that the Library and Reading Room may be opened by the 1st of July, with a full list of the best medical journals upon the tables and more than 1,000 volumes upon the shelves. These latter will include complete series of the leading journals for the past fifteen years.

Most Pressing Needs.—Donations of books, journals, reprints, pamphlets, etc., in fact of everything bearing upon or treating of medical science are required, and will be doubly valuable if sent in at once. No publication, however small or seemingly unimportant, will come amiss, as they may be used in completing sets, or for the exchange list. Probably every physician in Ontario has some books or journals which he can easily spare to aid in making this library complete. The approaching meeting of the Provincial Medical Association will bring many to the city. It will greatly aid the committee if each physician bring with him whatever he can spare for the library. Donations of books should be directed to the Curator at 259 Simcoe St., Toronto, and he will be very glad to send to any part of the city for parcels of which he may be notified by post-card.

The provisional Board of Trustees is composed as follows:—President, Dr. Graham; Vice-Presidents, Drs. Arnot, Burns, and Henderson; Sec., Dr. Wishart; Curator, Dr. N. A. Powell; Treas., Dr. McPhedran; Librarian, Dr. Pyne; Members, Drs. J. W. Rosebrugh, Mullin, and Nevitt; to any of whom subscriptions or donations of books may be sent.

D. J. GIBB WISHART, *Sec.*

Toronto, May 24th, 1888.

Correspondence

OUR PHILADELPHIA LETTER.

PHILADELPHIA, 12th April, 1888.

AN AFTERNOON AT THE PHILADELPHIA ORTHOPŒDIC HOSPITAL AND INFIRMARY FOR NERVOUS DISEASES.

This institution was organized in 1867 as an Orthopœdic Hospital, and in 1872 an infirmary for nervous diseases was added with Dr. S. Weir Mitchell as attending physician. On Mondays, Wednesdays and Fridays the physicians, Drs. S. Weir Mitchell, Wharton Sinclair, and William Osler hold clinics for nervous diseases, and on alternate days Drs. Thos. G. Martin, Wm. Hunt, and H. E. Goodman see the orthopædic cases. The care and system with which the notes have been recorded, particularly of nervous cases, is to be commended, and might be followed with advantage at other institutions. Thus there are separate case books for epilepsy, hemiplegia, chorea, infantile paralysis, neuralgia, etc. An illustration of the value of thus carefully recording observations, is shown by the fact that Dr. Osler, in hi

lecture on chorea, delivered at the hospital last spring, was able to analyze, from the books, nearly five hundred cases. As far as possible the symptoms are entered in regular order following a printed card of instructions, which is always on the table.

It is in the out-patient department that much of Dr. Mitchell's best work has been done. In the wards are a large number of hysterical women on the "rest treatment," or as the French and Germans call it "The Weir Mitchell Cure."

Dr. Burr, the house-surgeon, has kindly given me a detailed account of this "rest treatment" as here carried out.

The patient has absolute rest in bed; does not lift her head from the pillow, is fed by an attendant. Her diet is milk: on the first day she receives three ounces every two hours; this is increased an ounce each dose until she gets eight ounces every two hours, or eight ounces eight times a day. The first dose is given at 7 a.m., and the last at 9 p.m After a variable time she is allowed bread, and then eggs and fish. Usually for a month or six weeks at least, milk only is given. Visitors are not permitted; no letters or papers are allowed, and she is permitted neither to write nor read. The nurse may read to her a short time daily. Massage is given for half an hour, either in the morning or both in the morning and afternoon. Subsequently the rubbing may be extended to an hour. Faradization to muscles and spine once a day at first, afterwards twice. The class of cases treated in this manner is represented by the following examples. Thus in bed iv. of the women's medical ward is M. S. aged thirty-seven, admitted two days ago, who has had for thirteen months, symptoms of hysteria following an accident. She has had convulsions, etc., was conscious but could not speak; had paralysis of her right arm and leg for twenty-four hours, which disappeared suddenly. Once she was palsied in left arm alone. There is great pain in the back and neck; tender spots over the spine, and there are areas of anæsthesia. She could not walk for eight months. Externally she is a picture of health. These cases seem not uncommon; there are two other patients in the house with hysterical symptoms following injury. Page calls the condition traumatic neurasthenia. The results of this apparently simple method, are well known, but one or two cases may be given in illustration. A Miss B. who has been ill ten years, and on her back eighteen months, unable to walk. is now, at the end of three months treatment, able to walk around and come down stairs. A Miss S. from Canada, who has been ill for six years with most aggravated symptoms of hysteria, and whose ovaries and tubes were removed without any benefit, two years ago, seems now quite well after ten weeks treatment. Dr. Burr states that during the past year, very few cases have resisted this method. no matter how prolonged and obstinate.

In illustration of the remarkable results of what might be called a combination of faith healing and the "rest treatment," was the case of Miss G. admitted a few months ago under the care of Dr. Osler. She had been profoundly hysterical for at least fourteen years, and during this time had not walked. With every possible hysterical manifestation, from hemi-anæsthesia to retention of urine, she plagued her doctors and wore out her relations. On admission her legs were somewhat wasted, in a condition of extention; the reflexes slightly increased but with normal electrical reaction. Daily massage, electricity, and the stimulating influence of hospital and hope, put this paralytic on her feet within a month, and she walked out of the hospital within twelve weeks. She has had no return of her paralysis, but has since had hysterical retention of urine.

In the Children's Ward were several cases of great interest. Among others may be mentioned the case of a child of three years, with congenital bi-lateral spastic hemiplegia, the result, in all probability, of selerosis of the cortex cerebri. In the Boys' Ward up stairs, is a similar case, admitted the previous day. In this instance the child, also aged three, was bright and intelligent. They usually appear to be either imbecile or idiotic. Dr. Burr tells me that a considerable number of cases of spastic paralysis in children come to the hospital, some hemiplegia, others paraplegia. Injuries at birth, cerebral hemorrhage, and when older, an encephalitis, analogous apparently to the uryelitis of the anterior horns which produces the special palsies of infants, are the chief causes of this spastic condition. Unfortunately, it is not so amenable to treatment as the spinal disease.

In the Woman's Ward there was an interesting case of unilateral wrist-drop in a woman aged forty, the result of neuritis, which illustrates what

may be done in this condition by systematic treatment. She was from near Richmond, Quebec, and had not had the use of her right hand since last May. The attack had come on with great pain, and Dr. Osler, under whose care she is, inclines to attribute it to a rheumatic neuritis as she shews no sign of lead poisoning, and had not received an injury. She had massage twice daily, electricity once a day, no internal medication. After three weeks treatment she began to improve, and can now extend the wrist and the hand almost as well as the other one.

In the Men's Ward, the cases are chiefly spinal; thus bed I. spastic paralysis from spinal injury. Bed II. amyotrophic lateral sclerosis, the condition in which wasting of the muscles, with spasms, and the characteristic symptoms. Bed IV. a patient with transvesre myelitis and spastic paraplegia. Rest in bed for a week greatly relieved the pains, and diminished to a remarkable extent the exaggerated reflexes, the ankle-clonus having disappeared.

A remarkable instance of the terminal stage of pseudo-hypertrophic muscular paralysis was seen in the Boys' Ward, in a lad of eleven, who had lost power completely in the legs and thighs from atrophy, following the pseudo-hypertrophy, while the arms were still large, and the cheeks very prominent from involvement of the masseters.

One of the most interesting features of the hospital is the laboratory, which Dr. Mitchell has equipped for the special purpose of studying disorganized muscle and nerve functions. He is at present engaged in a research on the ankle clonus. He has already published several papers on the physiological and pathological significance of the knee-joint.

INGERSOLL OLMSTED, M.B.

OUR NEW YORK LETTER.

From our Own Correspondent

NEW YORK, May 24th, 1888.

The treatment of fractures of lower end of the humerus, as treated largely in New York, may not prove uninteresting to many of your readers. Chambers Street Hospital is situated in the busiest part of the city, and is intended for the treatment of all kinds of accidents, fractures, wounds, and, in fact, all sorts of emergency cases. They treat from 150 to 300 cases a day, which is probably more than that of any other three or four hospitals in the city, *i. e.*, as regards this class of cases. Their method of treating fractures of the humerus about the elbow-joint—whether the fracture be that of either of the condyles, epicondyles, transverse, T-shaped, or oblique fracture and involving the elbow-joint—is about as follows as detailed by Dr. Powers, the Resident Surgeon in charge, at the Academy of Medicine, the other evening:—In all these cases the treatment was substantially the same. A diagnosis is first made if possible, without the aid of an anæsthetic, but if it cannot be made positively, or if there be much pain, then the patient is etherized, and the diagnosis made. The forearm is then flexed to about a right angle, and midway between pronation and supination, cotton is wrapped about the arm and forearm, and a good deal about the elbow, a flannel roller loosely applied, and over this the plaster of Paris, by means of a roller, the dressing extending from a little above the wrist to the upper part of the humerus. The dressing should be stronger thicker posteriorly than anteriorly, on account of the weight. After the hardening, which will be in a few minutes, it is put in a sling. If there be any error at all in applying the plaster it should be on the side of being too loose, rather than tight. If too tight, as manifested by the pain and appearance of the hand, it will of course have to be taken off and re-applied. This dressing is left on ten days, when it is taken off to see that everything is all right, and if so and the fragment in place the same kind of dressing is re applied and again removed in eighteen days, or the twenty-eighth day after the fracture. By this time the fracture will have firmly united. The patient is now instructed to poultice the elbow frequently—the oftener the better. The arm is to be used actively—not passively. In children the opposite arm is confined at first at nights, and later altogether in order to give the other elbow more to do. The joint functions are soon established up to the normal standard. Dr. Powers reported 50 cases, of which 3[illegible] recovered with a perfect result—absolutely no deformity or impairment of motion. In seven extension was to about 170°, and with a prospect of soon reaching the normal with no deformity. In four a very slight deformity of external condyle but good motions. In one, anchylosis—the fra[illegible]

ture having been a comminuted one. One ununited, the patient having been in an almost chronic state of intoxication from time of injury until eleven months after. One, a gun-stock deformity. In the others the dressing had been so recently taken off that a result could not be stated, but a good result was anticipated. So that out of fifty cases, there were but three bad recoveries. I saw ten of the patients recovered, in all of whom the joint functions were perfect, a very slight deformity in external condyle being present in one. By this method of treatment the fragment is kept in place, the joint is kept at absolute rest, passive motion is done away with, and as Dr. Powers showed, a good result was obtained in 90% or over. Anchylosis is to be expected rather where the joint is not kept absolutely at rest and passive motion employed, than when absolute rest followed by free voluntary motion is employed. Dr. Alles, of Philadelphia, treats these fractures in the same way with the exception that he puts them up with the forearm in extension; the treatment otherwise the same.

This afternoon I saw a case of leprosy at Charity Hospital. The patient, a man about 35, is not isolated from the other patients, but mingles more or less with them. For the past twenty years there has been at least one case of leprosy in this hospital, but no other cases have developed as a result of contagion.

Acute gonorrhœa is treated at the Polyclinic, by irrigating the urethra with a solution of permangate of potash, using a drachm of a 5% solution of potash permangate in a quart of warm water. This is done twice a day and good results are reported to be the rule.

CANUCK.

To the Editor of the CANADA LANCET.

SIR,—Now that we hear so much of "Combines" might it be asked of you: "Is there any such thing as a 'Surgical Instrument Combine'?" and if not, how is it, that such exorbitant prices are forced from us, for the most trifling surgical instrument, or appliance, or dressing?

The outrageous prices coolly demanded necessitates a purse as long as the moral law. Many instruments, such as forceps, used by skilled mechanics, can be bought for less than half what has to be paid for them, if required by a physician. Trifling things, as antiseptic gauze, cotton wool, corrosive sublimate tablets, india-rubber tube, catgut, etc., are charged for at about 500 times their intrinsic value. A piece of gauze five yards long, soaked in five cents' worth of corrosive sublimate, is put up and $1.50 is coolly demanded, and the tariff is blamed for it. The same way in instruments; those of the most inferior quality, tawdry, nickel-plated rubbish, is shoved off, on us, at prices large enough to stagger a plumber.

The finest quality of instruments are not to be found in the country, for sale; wretched pot-metal, nickelled imitations are all our choice, and for such as are presented to us, prices, far exceeding those of the finest English, French and German make, are forced, by our necessities, from us.

While the fact is, that the tariff is to blame for about 40 per cent. of the price, still this is merely used as the erdinary pretext for exorbitant profits being demanded. High as the New York price are, it will pay any one, even from this extreme country, to go there and make his selection, if his purchases are about $50 worth, and trust to the capacity of his pockets to relieve him from the privileges of an importer. That it would be a good thing to have the duty removed from all instruments not made in Canada, we all admit; but a better thing far would be the welcome visit of some first-class English, German or French manufacturer, who would be welcomed like the prophet who went out and blessed Israel. In neither price or quality will we ever have a change, until the profession makes a plain, vigorous protest against the outrageous charges demanded of them, which I intend will be forth coming at the next meeting of our County Association. Yours,

HURONIAN.

Editor CANADA LANCET.

SIR,—Shortly after your next issue, the meeting of the Ontario Medical Association will take place, and with your permission I would like to draw the attention of that body to the necessity of giving a pronounced opinion upon the subject of a Provincial Inebriate Asylum, with the hope that a committee of its members will be appointed to confer with the Government and City Council, looking towards the establishment of this much needed institution.

Many gentlemen, both in the city and the coun-

try, have been for years prominent in agitating the subject, and every physician has experienced the inadequacy of present means to cope with this particular class of patients.

No doubt many of these gentlemen will be present at the meeting on the 13th and 14th, from whom the committee I suggest might be named, to advise with the authorities in all things touching this subject.

From village, town and city throughout the length of the Province, comes the urgent appeal for a suitable place for the proper care and treatment of those who are contracting or have contracted the habit of inebriety. On the one hand, the family and friends are unable to control, by their individual exertions, the patient, when the desire for over-indulgence seizes him, and the latter generally has his or her own way for weeks, there being no remedy applicable, but to let them exhaust themselves; on the other hand, there is no coercive measure, short of the common jail, and all the associations and contaminations with those who are morally and physically vile and filthy. A thousand times in this fair city have the family and friends preferred the alternative of letting the patient drink himself or herself to death, rather than adopt the alternative of the common jail, and are doing it to-day,—rather than they should consort or familiarize with the average inmate undergoing restraint in the jail. So, between the two, there is no happy medium.

Inebriety to-day is not received in the same light it was a quarter of a century ago, it is verily a disease, and we owe it to the public to educate them to this view. As other diseases, it may be hereditary or acquired, and as such should have the same Christian charity and paternal care, kindness and treatment extended towards it.

The rules regulating hospitals for general diseases are not applicable and will not meet the requirements of this form of disease; neither will asylums for the insane,—though, in many instances, those inebriates have stages when they are as irresponsible as any inmate of an asylum for insane.

Being, therefore, brought face to face with these facts, and the total inadequacy of any means in our power to successfully treat these cases—being cognizant fully of the great number who to-day and for years have been wrecking themselves, their families and estates, we will be neglectful of our duty to our homes if we make no effort to raise this reproach from out our Province.

No way appears but the erection of an Inebriate Home, combining such of the rules of both hospital and asylum as will meet the wants of these cases. Special rules to regulate it, and commitment within its walls to be as carefully guarded as those of an insane asylum. Of the many plans in various places adopted, I know of none which, to my mind, embodies a true regard for the welfare of the patient and the welfare of the community.

Compulsory incarceration should be in the hands of the county judge and two physicians. The period of time for residence, compulsory or otherwise, to be decided by a board of advisors composed of medical men, county judge, and city and provincial represenfatives, who will pass in private review, once every month, every patient, limiting or lengthening their term to the best of their judgment. In this manner the so-called "liberty of the subject" would be safely guarded and abuses never be able to creep in. Upon this board of advisors the Ontario Medical Association might undertake to appoint the medical members for certain terms of years; the others, as representatives of the city and province, might be named by these bodies respectively.

Dr. Clark, in his excellent article on this subject, points out that an Inebriate Home would likely be self-supporting, so that question need not be discussed, as he is a good authority; but, apart from a building, only small grants would be required from the city and the province, to be supplemented by the contributions of those having means to pay for their attendance.

These are a few details inserted at the present time, with the hope that the subject will be put into practical shape at the meeting of the Association soon to be held.

I am, yours truly,

J. E. WHITE.

Selected Articles.

CASES TREATED WITH IPECACUANHA SPRAY AT THE WESTMINSTER HOSPITAL.

BY WILLIAM MURRELL, M.D., F.R.C.P.

The Ipecacuanha Spray was originally introduced as a remedy for chronic bronchitis and other diseases of the throat and respiratory organs in consequence of the reputed success attending the use of a nostrum, both in London and Paris, by an irregular practitioner. It was difficult to obtain

any clue to the composition of the secret remedy, as apparently the proprietor varied the constituents from time to time, in order to puzzle the analysts and escape detection. Some patients said that it was a clear colorless fluid like water, whilst others were confident that it was yellow, or red, or even blue. Some thought it was tasteless, whilst others declared they recognized the not unfamiliar flavor of dry sherry. They all agreed, however, that it was used in the form of a spray, and that its effects were little short of marvellous, a few inhalations affording prompt relief, both to the cough and shortness of breath. It always loosened the phlegm, and frequently gave rise to copious watery expectoration. It obviously belonged to the class of medicinal agents which we call expectorants, and as there was no reason to suppose that it was a rare or unknown drug, the sphere of investigation was considerably narrowed, for many remedies were obviously unsuited for administration by this particular method. A number of preliminary trials were made which speedily demonstrated that even if the specific were not ipecacuanha wine, that very useful drug entered largely into its composition, and that locally applied in the form of a spray it was capable of affording relief to congested and irritated bronchial mucous membranes. Sometimes the ipecacuanha wine, pure or diluted with an equal quantity of water, was used with a small steam vaporiser, but more commonly the ordinary hand-ball spray apparatus, such as is employed for the production of local anæsthesia, was preferred. A solution in spirit made of the same strength as the wine was found equally efficacious. After a few visits the patient was usually taught how to use the apparatus himself.

The following may be regarded as typical of a number of cases which have been under treatment at the Westminster Hospital during the last six months :—

I. Case (reported by Mr. E Lucas Hughes, clinical assistant) showing the value of the ipecacuanha spray in bronchial catarrh :—

David J., æt. 53, a cigar maker by trade, has had a cough in the the winter for twelve years or more. "There is not much dust in his work, and he is not exposed to wet or cold, but he has travelled a good deal, and has known what it is to rough it He has been to America fourteen times, to Australia, Sandwich Islands, and many other places. He is fond of going about, and as he is a good hand at his work, and can always get employment, he sees no reason why he should always stay in one place. "The cough is troublesome, but is not paroxysmal. There are no bad attacks of cough, but there is a good deal of hacking, and this keeps him awake at night. There is very little expectoration. certainly not enough to give him any trouble. He has had no hæmoptysis, and has not lost flesh. On examining the chest the percussion note is found to be normal. Small râles are detected at the left apex in front, and at the right base posteriorly. The patient was given 15 cc. of ipecacuanha wine, with an equal quantity of water, by a steam spray apparatus, and this was repeated on three successive days, the dose being gradually increased to 30 cc. On the fourth day the hand-ball spray was used, and at the expiration of the week the patient reported that his cough had entirely left him, and that he was practically well. On examining the chest it was found that the rhonchus had disappeared.

II. Case of chronic bronchitis and winter cough (reported by Mr. L. Hughes), illustrating strikingly the benefit which may frequently be obtained by the ipecacuanha spray :—

Francis P., æt. 58, has suffered from winter cough for the last twenty-five years. He gets rid of it for only a short time in the summer, and for the last thirteen years it has been not a winter cough, but a winter and summer cough as well. This year he has had it badly since the beginning of December. It comes on in fits, which often last ten minutes. He always has two or three bad bouts of it in the daytime, and one or two at night. If they come on when he is out he has to cling to the railings, or hang on to anything that may be handy. The expectoration is always thick, and it may be yellow or white, sometimes streaked with black, especially in the winter. He has never brought up any blood, with the exception of a mouthful now and then. He gets short of breath, especially on exertion, or after a bad fit of cough. His occupation is an unfavourable one, for he is engaged in heaving sacks of coal at the gas works. He gets as hot as any man can get, he says, and then goes out or stands in a draught to "cool down a bit." This he thinks has tried his constitution. On examining the chest it was found that there was a little general emphysema, with sibilant rhonchus over the right front and back. Immediately after the patient had been examined he was made to inhale a spray of equal parts of ipecacuanha wine and water. The Richardson's apparatus was employed, and the quantity of the diluted wine used was 5 cc. The chest was then at once re-examined, and it was found that the sibilant rhonchus had entirely disappeared from the front, and had almost gone from the back. After inhaling 10 cc. more of the diluted wine the patient expectorated freely. At the expiration of five minutes, during which 35 cc. had been sprayed, the abnormal signs had entirely disappeared from the chest. The patient came the next day, and had another inhalation of 40 cc. This was repeated on six consecutive days, when the patient reported that he was quite well. The cough had left him, there was no expectoration, the breathing was easier, and his appetite had returned. On examing the chest no rhonchus was to be found.

III. The next is a fair specimen of an obstinate case of winter cough treated by the same method:—

Mary A., æt. 32, came to the hospital on January 29th, with a winter cough of many years' standing. She reports that it is worse this year than it has ever been before. It is paroxysmal, the slightest exertion, even talking, bringing on an attack. The attacks vary very much in duration, but rarely last less than ten minutes. In the twenty-four hours she expectorates quite a teacupful of thick yellow phlegm. She is extremely short of breath, is quite unable to do her housework, and at night cannot sleep unless propped up with three pillows and a bolster. The breathing is worse at night, and fog increases all her troubles. She has been hoarse for weeks, and her voice goes if she attempts to talk. Her chest is very sore from coughing, and she aches all over. She is emphysematous, and the breath sounds are obscured by cooing râles. On February 3rd the patient who had an inhalation on five consecutive days, said she was better in every way. The breathing was easier, the cough was not so violent, her chest was not so sore, the expectoration was less, and the hoarseness had nearly gone. Three days later, the inhalations having been continued meanwhile, she reported that she was better than she had been all winter. The improvement in her breathing is so great, she can now do with only one pillow instead of three. She sleeps better, and there has been great improvement in the cough, which, instead of being aggravated at bedtime, is easier. Expectoration has almost ceased. On the 10th, having had no inhalation for three days, she complained that there was shortness of breath. On the 12th, after two more inhalations, it was better. On the 17th the note was:—"Has had but one inhalation since last date. The cough has now almost left her, and she often goes twelve hours without a fit. Her breathing is so much better that she does her own housework, and is not propped up at night." She was discharged after ten inhalations and nineteen days' treatment. A month later she called and said that her breathing was all right, and that with the exception of a slight hacking cough, she had been perfectly well since her discharge.

IV. The following is a case of fibroid phthisis in which the ipecacuanha spray afforded prompt relief to all the prominent symptoms:—

Fred. L., a mason, æt. 20, came to the hospital on November 20th and gave the following history. He had a cough last winter for the first time, it lasted from Christmas to June, but he was free from it during the rest of the summer. This year he has had it seven weeks. It comes on in paroxysms, four or five in the day, each lasting from five to ten minutes. The attacks are so severe that he has often to stop in the street and hold on to the railings. He is sick after a violent attack, and this has greatly reduced his strength. The expectoration is watery, not thick, and there is usually a pint or more in the twenty-four hours. He spat blood several times last winter, but only in small quantities. The loss of flesh has been considerable and he weighs two stone less than he did twelve months ago. He is much troubled with shortness of breath, and has some difficulty in getting up stairs. He lives only a mile from the hospital, but it is farther than he can walk, and he has to take the omnibus. His voice is getting weaker, and he is so ill that he has done no work, except an odd job here and there, for over a month. On examining the chest, the signs of a dry cavity were exhibited at the apex of the right lung. He was given an inhalation of ipecacuanha wine on three consecutive days, and at his fourth visit he said that the cough was easier than it had been for many months. The sickness in the morning had left him, and he could walk with comparatively little difficulty, and even get up stairs. He continued to improve under this treatment, although somewhat slowly, and after the sixth inhalation his chest was painted with iodine liniment over the site of the cavity. From this time he progressed much more rapidly, and at the expiration of a fortnight he was discharged, after ten inhalations, comparatively well. No other treatment was adopted.

V. The following case is of interest as it serves to illustrate the beneficial effect of the ipecacuanha spray in loss of voice, due to congestion of the vocal cords:—

George E., æt. 51, an engine inspector on one of the railways, came to the hospital, on November 27, complaining of hoarseness. He had been quite well, he said, until about three weeks before, when he had got wet through and had caught a bad cold. His voice had been gradually getting weaker, and for some days he had been unable to speak above a whisper. He kept at his work, but could not talk much, and had, as far as possible, to convey his meaning by grunts and signs. He had never been ill before, and hardly knew what it was to have a cough. He was a big, fine fellow, but looked the picture of misery from his inability to speak. His chest was carefully examined, but nothing wrong could be detected. On laryngoscopical examination the vocal chords were found to be swollen and congested. He was at once given an inhalation of ipecacuanha wine—two drachms and a half—by means of a steam spray apparatus, and immediately his voice became clearer and he could speak without much effort. He was unable to attend again until December 8th, when his voice was worse and he could hardly speak at all. It appears that he had been at a smoking concert the night before and could not resist the temptation to join in the choruses. What between the smoke and the harmony he was almost voiceless. On examination it was found that the left ventricular

bands were greatly swollen. He was given another inhalation of ipecacuanha wine, four drachms being used this time, and at once, as on the previous occasion, his voice became clearer. The next day he came again, and after another inhalation a still further improvement was noticed. He was given no medicine with the exception of a purgative pill. On the 11th he had his third inhalation, four drachms again, and on leaving he declared that his voice was nearly restored. He took great pains to inhale thoroughly, and probably much of the ipecacuanha was absorbed. The next day he was still better, but reported that the spray had made him sick. He had another inhalation and did not return till the 22nd, when he came to say that he was perfectly well, and needed no further treatment. The vocal cords were examined and found to be healthy. He was discharged cured after five inhalations.

VI. In the next case hoarseness depending on congestion and ulceration of the chords was relieved by a course of the ipecacuanha spray :—

Emma V., æt. 30, single, a children's nurse, came under observation on December 4th. She stated that she had had a cough every winter since she was a girl at school. It troubled her most at night, and frequently disturbed her rest. It usually came on in fits, and she could obtain no relief until she had expectorated a quantity of thick phlegm. She had been more or less short of breath for three years, and had often experienced considerable difficulty in getting upstairs. There was a little loss of flesh in the winter but nothing very much. She had never had sweating at night, and there was no family history of phthisis. Her geneaal symptoms troubled her very little, but she was much alarmed at losing her voice a fortnight ago. She speaks now in a guttural tone and evidently with considerable discomfort and distress. She attributes her symptoms partly to having to get out of bed at night to attend to the children, and partly to the fact that she has to sing to them, and also in a choir. On examining her chest she was found to have a little moist rhonchus at both bases. On laryngoscopical examination it was found that there was ulceration of the right chord, with congestion of both. She was given an inhalation of ipecacuanha wine, by means of the steam inhaler, and an important improvement in the voice was at once apparent. The improvement, however, was only temporary, and the next day she was as bad as ever. She had eleven inhalations before there was any improvement. Sometimes she had the spray from a Richardson's apparatus and sometimes from the Siegle's, but she preferred the latter. She was kept under treatment until December 29th, by which time her voice was perfectly clear and all her symptoms had disappeared. At her last visit the chest was examined and was found to be free from rhonchus, whilst the laryngoscope showed that the ulceration of the vocal chord had disappeared.

Remarks.—Most successful results are obtained from the employment of the ipecacuanha spray in cases of chronic bronchitis and bronchial catarrh. In fibroid phthisis there is often a marked improvement, even when no constitutional treatment is adopted. A single inhalation will sometimes restore the voice in case of hoarseness due to congestion of the vocal chords. It is a matter of little importance whether the spray be given with a handball spray apparatus or with a small steam vaporisor. In either case the spray must be warm and the patient should not go out for some minutes after inhaling. Care should be taken to see that the spray really enters the chest and is not stopped by the arching of the tongue against the wall of the mouth. The best results are obtained by using the spray for about ten minutes three or four times a day. In the majority of cases of winter cough relief will be obtained in ten days.—*Medical Press and Cirrular.*

THE TREATMENT OF PUERPERAL SEPTICÆMIA AT THE PHILADELPHIA LYING-IN-CHARITY—WITH REMARKS.

The treatment is based upon the principle that puerperal septicæmia is caused by the entrance into the system of an infectious material through lesions in the genital passages. This infectious material is believed to be certain micro-organisms, which produce their effects either directly by their action on the fluids and tissues of the body, or indirectly through certain products of their activity, called ptomaines, or both.

The prime object of local treatment in puerperal septicæmia is to render and maintain the utero-vaginal canal in an aseptic condition. It must be recognized, however, that when once the germs are within the tissues or vessels of the puerpera, they are beyond the influence of local medication. Hence the result to be hoped from local anti epsis is, that it will limit the dose of poison to that which has been absorbed before treatment was instituted. The tissues and white blood cells must be left to battle with those germs which are already within the tissues, assisted by constitutional medication. Therefore the results from local treatment are most brilliant in cases of putrid infection, where the fever is due rather to the absorption of the products of decomposition of the lochia, or of fragments of retained placenta or membranes, than to the action of germs on the tissues of the patient.

Other objects to be gained by local treatment are to favor the healing of wounds, and promote the comfort of the patient.

Neither septic abscesses of the pelvic cellular tissue nor pyæmic abscesses have developed in the Charity's cases (within three years), nor has phleg-

masia dolens been observed. In two cases gonorrhœal salpingitis has developed *in puerperio*. In one—an out-patient—peritonitis succeeded, laparotomy was done by Dr. Longaker, the diseased tube removed, and irrigation practised. The patient was *in extremis* before the operation, and died shortly afterward. In one case an old pyosalpinx induced purulent peritonitis and death, without operation. These cases are mentioned to show the variety of conditions usually classed as "puerperal fever."

Where a diagnosis of puerperal sepsis is made, local irrigation is instituted at once, irrespective of the odor of the lochia. Where the temperature does not exceed 102° F., vaginal irrigation alone is practised. This is for the reason that infection takes place in the majority of cases through lesions of the vagina or vulva, and only exceptionally from within the uterus. Corrosive sublimate solution (1-2000 to 1-4000) is used. The irrigations are repeated at intervals of three or four hours by the nurse. Where the fever does not subside in from six to eight hours, or increases, the uterus is washed out by the physician himself. This necessitates a digital examination, when bits of placenta or membrane, if present, are removed by the finger. The dull curette has been used to some extent, both for diagnosis and the removal of foreign material from the uterine cavity, and is regarded with favor. But no mere instrument can give the information derived through the sentient examining finger; nor will any inflict so little traumatism in the removal of foreign bodies. The uterine cavity is examined only after vaginal irrigation, lest having previously escaped, it be infected by the septic vaginal discharges carried on the finger. The modified Bozeman canula is used. A hundred grain iodoform pencil is left in the uterus. This slowly disintegrates and is present in the discharges for two or three days. After this thorough disinfection, the fever, especially if due to putrid absorptions, usually disappears. Otherwise vaginal irrigation is continued as before; and should new chills occur, or high temperature continue (above 103° or 104° F.), the uterus is again washed out and the iodoform pencil left in as before. The woman need not be disturbed during the manipulations. The vaginal irrigation is discharged in a bed-pan, then the canula is introduced within the uterus along the finger, as a guide. All air is previously expelled and the stream allowed to run during the introduction. Irrigation is continued until the stream returns clear—from one to three pints are necessary. After removing the canula the uterus is grasped and made to expel all fluid, and the perineum slightly retracted to insure its discharge from the vagina. Dr. Wilson sometimes irrigates through a speculum. No case of serious mercurial absorption has occurred. Salivation was induced in one case. No case of iodoform poisoning has been seen. Not infrequently after the intra-uterine douche, and quite commonly after the removal of more or less putrid material from the uterus, a chill and rise of temperature results, which soon subsides. This is partly due to nervous shock and partly to the temporarily increased absorption of poisonous material, caused by abrasions produced during the manipulations of the finger, curette, or irrigator.

In those unfortunate cases in which fever continues in spite of treatment, it becomes a question, after several days, whether irrigation is of further value. Fetor of the lochia is a constant indication, but it is not apt to be present after the removal of foreign matter and thorough utero-vaginal disinfection. In the presence of marked parametritis, without special indications to the contrary, the vagina alone should be douched.

On one case diphtheritic patches occurred on the fourchette. They were treated by the application of pure carbolic acid, followed by iodoform.

Turpentine stupes, and at times poultices, are used in cases of metritis or peritonitis, with tenderness on pressure, and tympany.

Constitutional treatment, while considered in the majority of cases of secondary importance to local measures, is by no means neglected. Nor is it forgotten that in the cases in which marked invasion of the tissues and vessels by germs has taken place (before local antisepsis could cut off the supply), it is the only means of favoring a successful issue. The indications are to support the strength, combat hyperpyrexia, and meet special complications and symptoms. It is a problem of "the survival of the fittest" between the host and the invading germs.

Proper alimentation is of the highest importance, especially in protracted cases. Milk, given in quantities that can be assimilated, is largely depended upon. In irritable stomach, lime water or whiskey is added Beef tea, nutritious broths, and the various nitrogenous prepared foods are used as adjuvants, or where milk disagrees. Quinine in divided doses, not exceeding fifteen grains daily, is believed to conserve the strength. Whiskey is given as indicated. Most cases at all protracted, require it early, and can take it in large amounts. The first sound of the heart is the most reliable criterion by which to be guided in its administration. Brandy is at times substituted, and champagne is used where troublesome and otherwise uncontrollable nausea is present. The administration of spirits is considered of great value in combating septic fever.

Hyperpyrexia (approaching 104° F.), unless transient, is met by antipyrin (grs. xv to xx) repeated every hour or second hour, until the temperature falls below 102° F. The pulse is always watched during its administration, and stimulants given if necessary. In two cases, which subse-

quently recovered, collapse occurred after the administration of two fifteen grain doses of antipyrin at intervals of an hour, the temperature falling to 97° F. Quinine in fractional doses is substituted when the temperature is below 102° F., being used principally for its tonic effect. The cold coil has been used in a few cases.

Opium is largely relied upon to allay restlessness, induce sleep, and relieve pain. Pain is very seldom complained of; tenderness on pressure is usually its greatest manifestation. In the few cases in which peritonitis has been present, turpentine by the mouth and by enema has been used to relieve flatus. The question of opium *versus* saline purgatives is under consideration, but it is by no means considered advisable to prevent an occasional movement of the bowels. For weak heart, while digitalis is used, more is expected from alcohol and alimentation. Ergot is believed to be of use in preventing septic absorption, not only by favoring an empty and contracted uterus when used *post-partum*, but also, perhaps, by its action on the muscular tissue of the utero-vaginal canal and absorbents, in the presence of septic material. Other special complications and symptoms when present, are treated on general therapeutic principles.—Chas. P. Noble, M.D., in *Med. and Surg. Rep.*

THE TREATMENT OF INDOLENT ULCERS BY MULTIPLE INCISIONS.

The following method of treating indolent ulcers was devised by my honoured chief, Dr. A. Harbordt, and I am much indebted to him for his permission to make it more widely known. It has been applied with success for the last seven years in many private cases and in the wards of the hospital, and was described six years ago to the Medical Society of this city. It will be seen that it has claims to be considered a *radical* treatment, that is to say, it tends to remove the course of the morbid condition.

The chief reason of the small inclination to heal which these callous or indolent ulcers show, and of the great tendency to break down again which is observed in their cicatrices, is the defective nutrition, the inadequate blood-supply of the affected tissues. The margins of the ulcer consists of coarse cicatricial fibrous tissue with few blood-vessels, and its floor has an almost tendinous texture such as offers but little encouragement to cell-proliferation and regenerative growth. This fibrous and resistant induration is either a secondary result of the chronic irritation of the ulcer, as in varicose ulceration of the leg, or (as in *Case* II., after necrosis of the skin) the floor of the ulcer is formed of tense non-vascular fascia, incapable of vigorous granulation and defying all the stimulating preparations which might be applied to it. Even Weber's lateral incisions and Nussbaum's circular incision prove powerless in such a case; while transplantation, after the methods of Reverdin and Thiersch, is out of the question. Transplantation for success requires a healthily granulating surface, and here that is absent.

Our method is briefly as follows:—The entire ulcer is divided lengthwise by a deep incision extending far into the healthy tissue. Cross incisions are then made through the callous tissue into the healthy at intervals of about three-quarters of an inch. The incisions must go through not only the skin but through the underlying fascia; the wounds must grape widely. The bleeding, often profuse, must be stopped with tampons; and the whole wound, which it must be owned has rather a slaughter-house look, is done up with iodoform dressings. When after eight to fourteen days the dressing is changed, the difference in appearance is very marked. Healthy granulations are springing up in abundance from the gaping incisions, and soon cover the whole surface, reaching the level of the surrounding skin, from which the growth of the new epidermis is seen to advance rapidly. At this stage of course, when the loss of skin is great, transplantation may be effected and will now be useful.

The multiple incisions must of course be postponed till the ulcer is no longer foul, all necrosed fragments being first removed; this is in order to avoid the risk of septic infection of the deeper parts.

The advantage of the method is obviously that highly-vascular healthy parts are enlisted in the healing process of granulation, and thus not only the wound but also the resulting cicatrix are under more favorable conditions. It might be expected, and facts confirm the expectation, that this cicatrix is far stronger and more resistant than the thin covering which may occasionally be obtained from scanty granulations, after the use perhaps of every means in the surgeon's *armamentarium*, and with great difficulty at that. Such thin cicatrices, of feeble vitality from the outset, give way on the slightest mechanical or chemical irritation—the chafing of clothes, a slight scratch, or an acrid excretion—and the weary "cure" has to be begun all over again.

The method has been found especially valuable in ulcers lying over joints, the cicatrices of which are themselves endangered by continual stretching and movement, and at the same time limit the mobility of the parts involved. These troubles are successfully overcome by our method, as may be seen from the account of *Case* I. below. This was a burn extending over the whole flexor aspect of the arm and forearm, and the treatment by incision had to be carried out in more than one stage; some repetition was necessary, probably because

the first incisions were not extensive enough. The process of healing was protracted, but the ultimate result was extraordinarily successful, normal movement being restored except for very slight limiting of extension.

A further important advantage is, that the duration of the healing process is in almost every case shortened. In certain forms of painful indolent ulcer, the so-called *erethetic* type, which have a bad name for their painfulness and their obstinacy, repair and recovery become prompt, certain, and painless.

But one of the chief gains is certainly the improved quality of the cicatrix, and the diminished tendency to relapse, which every one who tries the method will be able to testify to.

It is of course obvious that the method has its limits of application: I may mention, for example, the diathetic difficulties introduced by the presence of syphilis, tuberculosis, scurvy, arterial atheroma, and so on. These require general treatment of an appropriate kind. But in the indolent ulcerations resulting from burns, severe contusions, varicose veins, and so on, the treatment has been of such signal service that we are encouraged to extend its application to other forms also.

I conclude with the cases above referred to: the numerous others treated have been all ulcers of the leg.

Case I.—Anna S——, æt. 24, servant, admitted *June* 24, 1887, with extensive burn of the third degree on the flexor aspect of the left arm and forearm. Iodoform dressing, and later ung. boricum. *September* 2.—Raw surface scarcely diminished, covered with pale spongy granulations, edges thickened and callous; no epidermal growth; floor coarsely fibrous, vascularisation slight. Under an anæsthetic multiple deep incisions made: iodoform dressing. *September* 30.—Surface all covered with healthy granulations, skinning over rapidly: active and passive movements permitted. *December* 20.—All healed except a patch, an inch or so across, in the bend of the elbow, which showed no tendency to heal. This was incised and dressed with iodoform. *January* 30, 1888.—All healed; extension of forearm up to 160°, flexion and rotation normal.

Case II.—Anton S——, æt. 41, mason, fell from a scaffold on *October* 17, 1887, and in addition to concussion of the brain and fracture of ribs received a severe contused wound, some four inches long, on the outer side of the left thigh; fascia lata split, and deep muscle protruding from the opening. Attempt made, after removing as much as possible of the crushed tissue and dirt, to suture the wound and obtain union by first intention. This failed, and there were symptoms of cortical irritation of the brain with delirium. The gangrenous parts sloughed away, and a large ulcer resulted with callous edges and floored by the fascia lata. Ordinary treatment failed entirely to bring about any diminution of the wound. *November* 25.—Multiple incisions made: iodoform dressing. *December* 8.—Wound granulating well. Iodoform-gauze and afterwards ung. argenti nitratis were used, and on *January* 31, 1888, the wound was entirely healed, and the scar had proved durable.—*Central für Chirurg.*—*The practitioner.*

MEDICAL NOTES.

A remedy for *warts*, suggested by E. Vidal, is the following:

℞ Acid salicylic.,
Alcohol, ... āā ℥ ij.
Æther sulphuris, ... ℥ v.
Collodii, ... ℥ x. M.

SIG.—Paint the warts with the solution daily.

An excellent prescription in some stages of *bronchial catarrh* is the following:

℞ Ammonii chlorid., ... ℥ij.
Extract. Glycyrrhizæ, . . . gr. xx.
Syrup. pruni virginianæ, . . fʒij.
Syrup. ipecac., ... fʒiij.
Aquæ., ... fʒiij. M.

SIG.—A teaspoonful every three or four hours.

A local application for the severe pains of *gout* and *rheumatism* is suggested by a cotemporary, to be painted on the affected joints every hour or two:

℞ Ætheris,
Collodii flexilis, . . āā ʒ xv.
Acid. Salicylic., ... ʒ iv.
Morphiæ sulph., ... ʒ j. M.

Brown-Séquard's favorite prescription for *epilepsy* was the following:

℞ Potassii iodidi, ... ℥j.
Potassii bromidi, ... ℥j.
Ammonii bromidi, . . . ℥iiss.
Potassii bicarbonatis, . . ℈ij.
Infus. calumbæ, ... fʒvj. M.

SIG.—A teaspoonful before each meal, and three teaspoonfuls at bed-time, with a little water.

In *influenza*, Dr. J. B. Scott, of Scandia, Kansas, states in the *Therap. Gazette*, Feb. 15th, 1888, that he has found ordinary expectorants useless, and has good success with the following as a remedy for the terrible cough and accompanying headache:

℞ Extract. yerba santa fluid,
Extract. grindeliæ robustæ fluid., āā fʒiij.
Syrup. pruni virginianæ, . . ad fʒj. M.

SIG.—A teaspoonful every two or three hours. Also good whiskey and nourishment.

Dr. E. T. Bruen, of Philadelphia, in the *Therap.*

Gazette, February 15th, 1888, gives the following formula for a tonic pill in *phthisis*:

℞ Iodoform., ... gr. ½.
Acid. arsenios., . . . gr. $\frac{1}{60}$ to $\frac{1}{40}$
Pil. ferri. carb., . . . gr. j.
Extract. cannabis indicæ, gr. ½.
Quinæ sulph., ... gr. j.

Sig.—One t. d.

M. J. Simon *(Lyons Médical)* suggests the following enema for *infantile convulsions*:

℞ Moschi, ... gr. iij.
Camphoræ. . . . . gr. xv.
Chloral hydrat., ... gr. vij.
Vitell. ovi., ... j.
Aquæ destillat., . . . f ℥ iss.

This to be used after the rectum has been emptied by means of a large watery or oily enema.

The following powders for the treatment of *coryza* are recommended by M. Vigier in the *Journal de Médicine*, Jan. 8th, 1888:

℞ Morphiæ hydrochlorat., gr. ¾.
Acaciæ pulv., ... ℥ j.
Bismuth. subnitrat., . . ℥ iss.
Althæ. pulv., ... ℥ iss. M.
Sig.—Use by insufflation in nares.

℞ Amyli pulv,,
Acid. boric.,
Tinct. benzoin, . . āā . ℥ iiss. M.

Triturate, sift and dry. Add gr. iss morphiæ hydrochlorat, if deemed advisable.

In cases of *cystitis*, Dr. J. B. Scott, of Kansas, reports that he has found the old formula, known as the Lafayette mixture, to produce excellent results (*Therap. Gazette*, Feb. 15th, 1888):

℞ Copaiv., ... f ℥ j.
Liquor. potassæ, . . . f ℥ ij.
Spirit. ætheris nitros., . . f ℥ j.
Extract. glycyrrhizæ, . . ℥ ss.
Ol. gaultheriæ, ... ♏ xvj.
Syrup. acaciæ, ... f ℥ vj. M.
Fiat emulsio.

Sig.—A dessert spoonful three or four times daily, after meals and at bed-time.—*Col. and Clin. Record.*

THE CONDITIONS OF LONGEVITY.

Professor Humphreys presents, in the *British Medical Journal* for March 10th, the final report of the collective investigation regarding aged persons. This report is based on the study of the family histories of 824 persons between the ages of eighty and one hundred years. The results of the investigation, as Professor Humphrey says, do not reveal anything very novel or startling, or give rise to fresh theories of longevity. They tend rather to dissipate certain ideas which are more or less current, though founded upon too limited observation, and to show that the maxims and laws which common sense and sound reason would dictate hold good, and that, as a general rule, those persons live the longest who might be expected to do so. Thus, he adds:

"1. The prime requisite is the faculty of age in the blood by inheritance; in other words, that the body has been wound up, as it were, and sent into the world with the initial force necessary to carry on the living processes through a long period, that this is the case with every organ, and that the several organs are so adjusted to one another as to form a well-balanced whole. The various functions will then be equably and harmoniously performed, and there will, consequently, throughout life, be little cognizance of imperfection or ailment of any kind.

"2. The body is usually well developed, and though there are many exceptions to this, rather exceeds the average standard of height. It is capable of much endurance and of quick and complete restoration after fatigue, this latter faculty giving the habit of, and probably the desire for, early rising; and with it also is associated a good power of recovery from the disturbances caused by accident or disease. The cerebral or intellectual powers accord with the general good quality, and the whole nervous system is active and energetic without being irritable.

"3. Owing to the inherent good quality of the nutritive processes, those degenerative changes which, in advancing years, always more or less diminish the elasticity of the arterial coats and of other parts, are slow to occur, so that the pulse retains, in great measure, its softness, and the thorax its vital capacity, while stiffness of limb and general feebleness are late in their manifestation. The decadence of the teeth, which in the animal world generally sounds a death-knell, inasmuch as it deprives the body of the means of obtaining its subsistence, does not seem to augur much in the case of civilized man, to whom the teeth are less directly needed for his maintenance, while another cuticular appendage, the hair, seems to share, to some extent, the enduring quality of the rest of the system."

To the foregoing must be added ordinary opportunities for living well, and under sanitary conditions. Temperance in eating and drinking are essential, but especially in meat-eating and alcohol-drinking.

Professor Humphreys thinks that, on the whole, old age is an enjoyable period of life when the body remains sound and the circumstances of life are comfortable.

Some of the most interesting physiological data are as follows:

The average height was a little over five feet seven inches; average weight a little over eleven stone (154 lbs.)

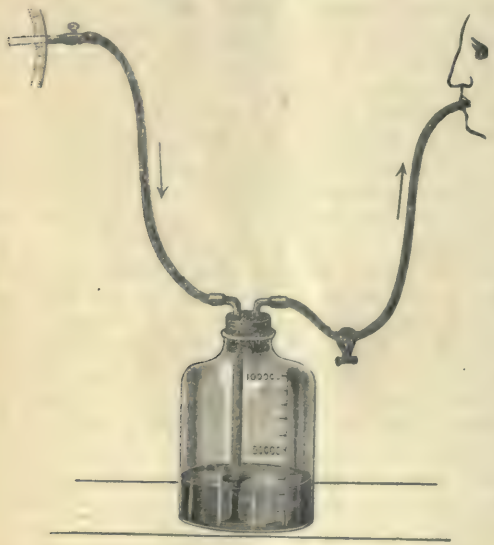
The sight was good in 224 out of 267 cases; the hearing good in 188 out of 329. Out of 320 over one-half took a little, or a moderate amount of alcohol.

The average duration of sleep was seven and two-third hours. The pulse averaged about 70 to 74; respiration, 20 to 21 per minute. The arcus senilis was present in 172 out of 266 cases. The heart was affected in 42 cases; the lungs in 62; the brain in 25; the urinary organs in 119 cases. —*Med. Rec.*

APPARATUS FOR REMOVAL OF PLEURITIC EFFUSION.

In the *Berlin, klin. Woch.* Prof. Fürbringer, of Berlin, describes an ingenious and simple apparatus for the aspiration of serous effusions in the cavity of the pleura.

This apparatus, of which we give an illustration, is composed of a receiving-bottle of about one quart capacity, with a rubber stopper, through which pass the ends of two glass tubes, bent at a right angle, and fitting hermetically. One of these tubes goes nearly to the bottom of the vessel; the other passes only through the stopper. The former



is connected with a rubber tube, fitting over a canula three or four millimeters in diameter, and supplied with a stop-cock; the latter is connected with another rubber tube supplied with a compression-stop. In using the apparatus, the end of the second tube is placed in the mouth of the operator and about three fluid ounces of a warm one or two per cent. solution of boric acid is sucked into the bottle through the other tube. The canula is then thrust with the aid of a trocar into the pleural cavity, the trochar withdrawn, the stop-cock closed, and the tube attached. The operator now sucks a little upon his tube and closes it; then the stop-cock in the canula is opened and the fluid begins to flow into the bottle. As soon as the effusion reaches the fluid in the bottle, the compression of the operator's tube is removed and the effusion will continue to pass into the vessels so long as there is any pressure upon it within the chest. When it ceases to flow spontaneously its flow may be solicited by suction upon the operator's tube. In this way about a quart of fluid can be removed from the chest without any risk to the patient or inconvenience to the operator. If the quantity to be removed at one sitting is more than a quart, the canula can be closed, the bottle disconnected and emptied, new antiseptic fluid poured into it, the patient's tube re-connected to the canula and the subsequent steps of the preceding procedure repeated. The method described provides for the slow evacuation of a pleuritic effusion in the most gentle and satisfactory way. It has been used by Fürbringer in more than fifty cases without accident or inconvenience, and certainly deserves to be brought to the attention of American physicians.

TREATMENT OF MEMBRANOUS ENTERITIS.—Dr. W. A. Edwards, of Philadelphia, in an article on membranous enteritis, says:—We may consider the treatment under two headings: the prophylactic and the active, or that which is appropriate during an interval or remission, and that which will resort to during an exacerbation. It is during the remissions or intermissions that we can hope to do more for our patient's permanent good than during an actual attack; it is at this time that diet, regimen, and hygiene are indeed the sheet anchors. A careful supervision must be had of the patient's daily life, all sources of irritation are to be removed, as hæmorrhoids or uterine disease Easily digested or even pre-digested food should be supplied, and care should be taken that undigested particles of food are not irritatiug the intestinal canal. As constipation usually exists, sometimes to a most stubborn degree, mild saline laxatives are usually most efficacious, or enemata may be resorted to.

Exercise for those who can stand it is of paramount importance; this, if possible, should be out of doors. Dr. Fowler most aptly says, he who stints himself in the drinking of water is dirty inside, and he also tells us that we must drink between seventy and seventy-five ounces of water per day in order to make up for the amount which is excreted by the lungs, skin and kidneys, amounting to ninety ounces a day; with the solid food we get but about fifteen ounces. Very few persons at home drink as much as that, but should they go to any of the numerous springs, in which our country is so peculiarly rich, drink five pints of water per day, lead a regular outdoor existence,

breathe pure air, as many of our springs are situated in most beautiful mountain regions, where the life spent out of doors is most beneficial, the patient will be improved in health, independently of any mineral agent whatever in the water. Unfortunately, however, all of our cases will be unable to avail themselves of a course of treatment at the springs, but as there is no doubt that most of the natural mineral waters preserve their value for a long time, we can put patients through a thorough course at their own homes with the additional advantage of having the case under our supervision.

During the acuteness of an attack opium will often be found necessary to afford relief, and possibly to check excessive secretion or hæmorrhage. Belladonna in the form of the extract, Dover's powder, subnitrate and subcarbonate of bismuth, together with local counter-irritation, all tend to abort the paroxysm, or, at least, to shorten its duration. The following remedies have been suggested: arsenic, copaiba, bromide of potassium, nitro-muriatic acid, henbane, vegetable infusions, prolonged counter-irritation, electricity, turpentine, iron, cod-liver oil, oxide or nitrate of silver by mouth or by high injections, chloride of ammonium, sulphate of zinc, bichloride of mercury, chlorate of potassium, oxide of zinc, blisters, warm water enemata, nux vomica, ergot.—*Am. Jour. Med. Sciences.*

Antiseptic Treatment of Phthisis.—Dr. W. H. Spencer, of Bristol, writes a valuable paper on this topic. His conclusions regarding the treatment of phthisis by iodoform and eucalyptol are:

1. He sees no reason to doubt that when iodoform is given in doses that the stomach will bear well, and given freely and continuously for long periods, it is absorbed into the circulation; and in the lungs, in whatever form it be, manifests its antiseptic (or anti-bacillary) action and properties. The good effects of iodoform so administered in phthisical conditions are too unequivocal to be gainsaid, however they may be produced.

2. He sees no reason to doubt that when the vapor of eucalyptol (or other antiseptic vapor that can be tolerated equally well) is inhaled continuously and for long periods, it reaches the residual air in the lungs; and so, externally as it were, bathes the affected tissues or suppurating cavities that may be open to the ingress of the air.

3. Thus, he thinks, we may have antiseptic remedies, not antagonistic, brought up on two sides to the sites of the inflammatory lung lesion, or the sites of bacillary activity; and these antiseptics, mutually co-operative, do affect for good both the inflammatory process and the bacillary activity, and bring about repair by the mode of organization after suppuration or fibroid substitution.

4. He thinks it both desirable and correct to treat pyrexia of acute phthisical processes, whether the temperature be high or moderate, by and for itself. He thinks that quinine, used as in the second case, promises great things for the future in this respect. He thinks that no other special antipyretic than quinine should be used in phthisis; and quinine serves other purposes as well when used as an antipyretic in moderated doses. It succeeded three times in succession, in the second case, in controlling the pyrexia—not the temperature merely.

In the treatment of these cases it is the object to bring about healing of the damaged lung tissue, and this by means of fibroid substitution. "In order to attain this end we must secure the same conditions and adopt similar measures, if we can by any means compass it, to those we find successful in dealing with suppurations, ulcerations, and the like lesions, in parts exposed to view." To secure these conditions we should adopt measures for supplying adequate nutrition—that is, adequate anabolism of tissue and the storing of energy—in the body generally, and in the damaged part in particular. We should deal with pyrexia on its own account, as a general and constitutional state, apart from the local suppuration or ulceration (as by quinine). We should bring the lesion under the influence of antiseptic remedies, both by internal medication (as by iodoform), and by external applications (as by inhalations of eucalyptol); and the application and influence of the antiseptic should be complete, continuous and prolonged.—*Journal Amer. Med. Association.*

Diagnosis of Asthma and Aortic Aneurism.—Dr. J. W. Lord and Kintzing report the following case. A coloured man, aged forty-nine, was admitted into the hospital with a history of irregular asthmatic attacks for four years, especially after any great exertion. The attack consisted of dyspnœa with cough, followed by the expectoration of a little thin serous fluid, which gave some relief. The spells of dyspnœa had increased in number, the cough become more constant, expectoration had steadily increased, and his voice had become husky; he had noticed that changes of position gave him relief, and that copious expectoration also brought a certain amount of amelioration. On admission there was very marked dyspnœa; the physical signs were those of advanced emphysema; liquid *râles* were heard all over his chest; the heart sounds were obscure, but a faint systolic murmur was heard at the mid-sternum, opposite the fourth cartilage; there was no difference between the radial pulses; the pupils were equal. Treatment was directed against the asthmatic attacks, but without much success, for the man died a few days after he came under observation. The heart was found on examination

after death to be greatly enlarged, the left ventricle being much hypertrophied. There was no valvular disease. The aorta was dilated and contained numerous calcareous and atheromatous plates; three large sacculations were also found just above the valves. Further, a large irregular aneurism of the dissecting variety was discovered, involving the transverse and descending portions of the arch. It completely surrounded the trachea and œsophagus, pushing them to the right. The sac was entirely filled with laminated clot. The pneumogastric nerve was compressed between the pericardium and the sac. The bodies of the second, third, fourth, and fifth dorsal vertebræ were eroded. —*New York Med. Jour.*

THE HOT BATH IN THE TREATMENT OF SLEEPLESSNESS.—Mr. S. Eccles, in the *Practitioner*, states that to secure sleep by means of the hot bath, the following precautions have to be attended to:—The bath-room must be heated to about 70° F., then the patient must be stripped in the bath-room, the head and face first being rapidly douched with water at 100° F. By this means the body is cooled, whilst a rush of blood is sent to the head. Then the whole body, excluding the head and face, is immersed in the bath at 98° F, rapidly raised to 105° or 110° F. In about eight to fifteen minutes the patient feels a sensation of pleasant languor, when he must be wrapped in warm blankets, and proceed to the bed-room with as little personal effort as possible. By the time the bed-room is reached the moisture on the surface of the body will have been absorbed; the patient must then put on his night-clothes and get into bed, lying with the head raised, hot bottles to the feet and well covered with bed-clothes. No conversation or moving about the room should be allowed, and all light must be excluded. In a few minutes the patient will be found in a quiet, refreshing sleep. The theory of the method is based on the sudden exposure of the body contracting the arterioles of the skin, causing thereby a corresponding dilatation of the vessels of internal organs, which in the case of the brain is further induced by the application of hot sponging. The immersion of the whole body next causes a dilatation of the vessels of the surface, except the head and face, with contraction of the vessels of the brain and gradual slowing of the heart's action, thus placing the brain in the most favorable condition for complete functional rest. There are certain conditions, however, in which this method is contra-indicated. Persons suffering from anæmia or emaciation, or from aortic valvular disease, or in whom signs of atheroma are recognized, should not be subjected to such rapid variations of local arterial tension as this process entails. In such cases massage may give good results.—*Glasgow Med. Jour.*

PERICHONDRITIS OF THE LARYNX.—This case has several interesting points. A man, forty-three years of age, presented himself with a subglottic swelling beneath the right vocal cord, producing hoarseness but no dyspnœa. Malignant disease was suspected. Eight days later tracheotomy was done on account of urgent dyspnœa. The vocal cords were almost hidden by swelling of the parts above them, and externally over the thyroid some tenderness and swelling were observed. Two days later a laryngoscopic examination showed increase of the swelling. The odor of the breath was offensive, and there was copious discharge of mucopus through the tracheal wound. Expectoration was free in consequence of a bronchitis which supervened. Iodol benefit. Ten days after the tracheotomy a small piece of cartilage was expectorated, and decided improvement followed. Scarifications were made with the laryngeal lancet, and vapor pini sylvestris was used. There was a slight degree of dysphagia and constant pain over the lower part of the left wing of thyroid. For more than a month the case progressed favorably. The patient then expelled quite a large piece of bone(?) and in a day or two had a return of bad symptoms. The larynx was again sacrified, and an ice-bag was applied. The improvement from this time was slow but without interruption. Four months after the tracheotomy the use of Mackenzie's three-pronged dilator was resorted to, so that in the course of three weeks it was possible to dispense with trachea tube. Iodide of potash was given, although no history of syphilis could be obtained. Iodol was found to act little better than iodoform. Headache was relieved by antipyrin. Subglottic laryngoscopy through the tracheal was attempted, but did not succeed. Chronic laryngitis seems to have been the cause of the lesion. The paper closes with a brief reference to a similar case, arising also from chronic laryngitis, in which the cricoid was involved, and for which tracheotomy was done.—*Br. Med. Jour.*

ACETIC ACID AND ERGOT AS ECBOLICS.—Since Dr. Grigg called attention to the value of vinegar as an ecbolic, I have frequently used it for that purpose. And I have also found that four drops of the strong acetic acid (representing nearly half a drachm of vinegar) combined with strychnine have been successful in bringing about contractions of the uterus after ergot had failed. In one noteworthy case, where in a very weak and anæmic woman the pains, after continuing feebly for a day or two, seemed to be leaving her, and ergot had been exhibited (the waters having broken), I found acetic acid and strychnine produce sharp and effectual pains.

The same thought, therefore, occurred to me as to Dr. Francis, of the possibly good results of combining it with ergot, and, in addition, observing

that acetic acid could extract the active principle from colchicum and ipecacuanha, I asked Messrs. Corbyn to make a preparation of ergot, using acetic acid as a menstruum, with a standard surplus of free acid. In a short time I received from them two samples, one of ergot extracted from acetic acid, of which a fluidrachm represented sixty grains of ergot with ten minims of free acid; the other an alcoholic extract of ergot, which also represented sixty grains of ergot and ten minims of free acid to each drachm.

Both preparations had the color of the ordinary extracts, but the acetic acid frothed when shaken, which, of course, the alcoholic extract did not do. The acetic acid process should be more economical than the spirit method.

In a case where there was retained discharge after labor I gave some of this extract, and when the medicine was exhausted wrote a prescription for a similar dose of *B. P.* extract, to which I also added some bromide of potassium, which is stated to aid the involution of the womb. The case was still unrelieved on my next visit, the uterus being obviously distended, so, after syringing out the cavity, I told them to have the medicine made up again, when the patient said, "Oh, sir, the medicine you gave me at first brought away something every time, but this medicine has done no good." This seems like a comparative test in favor of the acetic extract.

In a case of flooding, due to a large fibroid, I found that twenty minims injected deeply into the buttock gave rise to no local irritation, and there was no bleeding the night following, but there needs further experience before attributing this result to the drug. Ergotine disks did not always control it.—*Br. Med. Jour.*

Sir Morell Mackenzie's professional brethren have been greatly gratified by the confidence placed in him by the Emperor Frederick, and by the extraordinarily warm appreciation of the English physician's services which His Majesty has expressed both by word and deed. In conferring on Sir Morell Mackenzie the honors and decorations which he has so well earned, the Emperor added immensely to their value by a letter written with his own hand, of which the following is the full text:

"Charlottenburg, April 9, 1888.

"My Dear Sir Morell: You were called in to me at the unanimous desire of my German doctors who were treating me. As I did not know you personally I had confidence in you on account of that recommendation, but I soon learned from personal experience how to value you. You have rendered me most valuable services. In recognition of those services, and as a souvenir of my accession to the throne, I have pleasure in conferring upon you the Comthur Cross and Star of my Royal Order of Hohenzollern. Your well disposed

"To Sir Morell Mackenzie." "Friedrich."

One does not need to "read between the lines" of this letter to perceive its significance. The first sentence fully disposed of various mythical accounts of the way in which Sir Morell Mackenzie was called into the case which have been current in the profession and in society. Before subjecting the heir to the Imperal Crown of Germany to a formidable operation—which might, possibly, be attended with disastrous consequences, not only to the august patient, but to the whole of Europe—Professor von Bergmann naturally wished to have the sanction of an expert whose authority would be generally recognized. The choice lay between the leading English laryngologist and Professor Rauchfuss, of St. Petersburg, and the former was selected, as the Emperor says, "at the unanimous desire of my German doctors." The concluding words in which the Emperor speaks of his accession to the throne prove beyond all doubt that His Majesty believes that it is to Sir Morell Mackenzie's "masterly inactivity" that he owes his present position, with all that it involves. We are pleased to see that the people of Germany are beginning to judge Sir Morell Mackenzie's conduct of a most difficult and anxious case in a fairer spirit than some persons there seemed at first inclined to do.—*Br. Med. Jour.*

Posture and Rectal Disorders.—The study of the posture of the human body in its relation to the needs of daily life has received a new impetus from Minneapolis. A physician of that city contributes to the *Northwestern Lancet* an article demonstrating that the squatting posture is the natural and proper one in defecation, and that the adoption of it tends to relieve constipation, heal hemorrhoids, and prevent uterine displacements. The physiological squat, it is believed, places the body in a position adapted to secure the greatest pressure on the abdominal walls and rectum. Besides this, it is so uncomfortable that the operator has to attend strictly to the business of the moment. He cannot dally with the morning paper while exposing the gluteal regions to subterranean draughts, and thus laying the foundation for fissures, piles, and prolapsus.

The squatting position is naturally assumed, says, Dr Abbott, by monkeys, apes, and man. In savagery and on the frontiers of civilization this posture is the ordinary one. But man seems to be a luxurious animal, and our writer must admit that, on the very first opportunity, he abandoned the ape position for any appliance that will support the thighs, from the edge of a board to the elegant ease of artistically perforated and polished mahogany.

Dr. Abbott apparently makes a strong point for the squatting posture when he says it is the one recognized by Holy Writ. While this may be the case, there is some reason, on the other hand, to believe that the squat is the natural position

of the devil. At least we are told in "Paradise Lost," that

"Him there they found,
Squat like a toad close at the ear of Eve."

Hence it will not strengthen the case to bring in the religious factor. But Dr. Abbott puts the case most strongly when he pictures the indolence which the American temperament exhibits in the water-closet—the only place where he is not in a hurry.

"How far from nature," he says, "is the woman, who, perhaps intensely interested in the quesiton of blue or green for her bonnet, will sit in deep contemplation for ten minutes, straining, between thoughts, as if in childbirth, finally concludes she was mistaken and goes back to the bonnet, to return to the closet again only after three or four days constipation have given her a splitting sick-headache. Man abuses his blessed privileges in the same way, figuring perhaps on a real-estate deal instead of a bonnet, or perhaps with magazine in hand making increment above, but failing in excrement below."

If the primeval posture suggested will make men and women distribute the time devoted to their emunctories more judiciously, it may be a wise measure to adopt, although we fear that it is not destined to have a fair trial in any but strictly rural districts.—*Med. Rec.*

LACTIC ACID IN THE DIARRHŒAS OF CHILDREN. Dr. G. Hayem, more than a year ago, called attention to the remarkable utility of lactic acid in the diarrhœas of children. Recently, in a communication to the Academy of Medicine (*Revue de Thérap.*, February 15), he has renewed his suggestion, and presented new evidence of the value of the remedy. He finds that better results are had from larger doses that he formerly advised. In the more severe cases he has administered a 2 per cent. solution up to twenty teaspoonfuls in the course of twenty-four hours. The formula employed by him is the following:

Lactic acid (pure)	℥ss.
Syrupi	℥j.
Water	℥iij.

The strength of this is about one minim to the teaspoonful. The quantity given will vary with the age of the subject and the nature of the attack. M. Sevestre, one of the physicians to the Children's Hospital, confirms the statement of Hayem regarding the therapeutic power of the remedy in question, and he also finds that a considerable quantity is required to effect the best results. The latest experience demonstrates that a teaspoonful of the 2 per cent. solution should be given every five minutes in the worst cases, and from this up to a teaspoonful an hour; the amount required varies with the conditions present.—*Am. Jour. Med. Sciences*

SEVERE EFFECTS OF CASCARA SAGRADA.—Although the testimony of every one is almost unanimous as to the satisfactory and pleasant action of the fluid extract of cascara sagrada, yet its very severe and even prostrating action in a couple of cases reported by Dr. R. O. Cotter in the *Atlanta Med. and Surg. Journ.* (March, 1888), calls attention to the fact that even this substance cannot be used without care in its administration. The first case was that of a man 60 years of age, who was given a drachm dose at night for several days' constipation after an operation for cataract. The dose not acting, he was given the same quantity in the morning following, and the dose again repeated at noon. The bowels than began to act, and for twelve hours the purging action of the drug was so severe as to very closely resemble regular cholera morbus, and greatly prostrated the patient. But perhaps these doses were too frequently repeated, and Dr. Cotter states, and his experience will without a doubt be confirmed by others, that he has taken it himself in the same way with no unpleasant results. Then, again, he states that he prescribed a drachm dose for a lady patient at night, and a second dose was followed by a very severe action and great prostration and feebleness for three or four days.—*Therap. Gaz*

WARNER'S SAFE KIDNEY CURE.—The following purports to be the formula: Take of

Liverwort	1 oz.
Potassium nitrate	320 grs.
Water	q. s.
Alcohol	2 ozs.
Glycerin	12 drs.
Essence of wintergreen	40 mins.

Infuse the liverwort in one pint of hot water for two hours, strain or filter; dissolve the nitre in the infusion, and when cold add the alcohol, glycerin, and essence of wintergreen, and finally add water to make one pint.—*National Druggist.*

THE clergy have lately become much concerned over the future of physicians. Sam Jones says he would not care to go to heaven if he thought there were any doctors there. [The doctors have yet to be heard from—ED.] He doesn't know how it is that the study and practice of medicine makes men irreligious. In his experience it has been a rare thing for him to meet a religious doctor. At the late commencement exercises of the Detroit College of Medicine, the clergyman who made the address, also expressed the belief that there are no doctors "over there." He, however, was not ungracious enough to ascribe their absence to their wickedness, but simply to the fact that there are no sick angels. It did not seem to occur to our reverend brother that physicians could take part or pleasure in the exercises of the place, but that, as is the case here below, they must be doctors or nothing.—*Med. Age.*

THE CANADA LANCET.

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The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE PAST AND PRESENT TREATMENT OF PNEUMONITIS.

The ever varying treatment of inflammatory diseases, and especially that of pneumonia, has recently received some consideration and useful comparison with the modes employed by our fathers about the middle of the present century. The results obtained by able and conscientious investigators in this field certainly do not flatter us. Statistics, so far as can be obtained, clearly prove that the former treatment, viz.: the moderate extraction of blood, judicious catharsis, promotion of the various secretions, etc., in the early stage of suitable cases, which prevailed from 1840 to 1860, produced better results than have been obtained since. During that period in England, America and Germany, the mortality in pneumonia averaged but 8.33 per cent. Subsequently the agitation against blood-letting, cathartics, elimination and so called depressant remedies had its effect, which continues to the present. The antiphlogistic treatment was followed by the stimulant, which resulted in increasing the mortality in hospital cases to 25 per cent. in America and Germany, and by the recent returns of the Collective Investigation Committee of the British Medical Association, in more conservative Great Britain, to 18 per cent. This is certainly a bad showing for our boasted advance in medicine, but one which should teach us a valuable lesson. The worst results were obtained under the opium treatment, which prevailed for a time. The pendulum of professional opinion, started about 1850, against blood-letting and other so-called antiphlogistics, has evidently swung too far. It has recently not only ceased to progress, but started backward on its ceaseless course, and if these statements of statistical research are at all reliable its speed must be greatly accelerated.

It is to be sincerely regretted that we have no statistics of private practice to correct or endorse those of the hospitals. Many of the older physicians will be able to remember the general results of the former treatment in their younger days, and will doubtless candidly compare those results with these of the present, and confirm or dispute the correctness of the hospital statistics in relation to private practice. Personally, we believe that the results in the latter will, to some extent at least, confirm and endorse the hospital statistics. Experience is slowly teaching the older physicians that many of the alleged antipyretics are not producing the good ultimate results in inflammatory maladies anticipated, and we find that the administration of quinine in large doses, as well as the various recent drugs which subdue the pyrexia, seldom abort or subdue the inflammatory action, or prevent fatal resuits in severe cases. Nor have these alleged remedies proved free from danger, and more than a few instances have been published where they have hastened the fatal result if they did not wholly cause it. Their injurious effects are becoming more and more obvious as time to test their real value progresses, although these may have been caused by want of experience and injudicious administration. That antipyretics are, to some extent, useful in cases where the temperature exceeds 104°, obviating the evil consequences arising from hyperpyrexia, we think cannot be successfully disputed; but that they in any way benefit the acute organic inflammation, other than by suppressing the injurious excessive temperature, and allaying the neurotic irritation, is very questionable so far as experience has gone. Of the antipyretics, the least injurious and most effectual is the abstraction of heat by cold applications. The cool or cold bath, and nature's method of removing superfluous heat by evaporation of moisture from the surface, has long since been known as a remedy of value. Liebermeister, of Tubingen, has tested

its effects in 150 cases of pneumonia, and claims to have reduced the mortality from 25 per cent, for the previous thirty years, to 10.5 per cent., chiefly by these means. This is a very favorable result, but yet not equal to those obtained under the so-called moderate antiphlogistic treatment of a former period. The drugs, such as quinine, antipyrin, antifibrin, etc., he seldom used. He does not regard moderate fever an unmixed evil, but considers it retroactive and conservative, and, unless in excess, thinks no good purpose is served by suppressing it. Hydro-therapy is not, by any means, a new thing, but was employed many years ago in excessive fevers, inflammatory, and others, in connection with the then moderate antiphlogistic treatment by many successful and distinguished physicians. We should, therefore, employ so safe and reliable a remedy, when evidently demanded, while we hasten to retrace our steps wherein experience has shown that we have deviated from the true road, and return to the methods of treatment which have evidently produced the most desirable results.

FREE TRADE IN SURGICAL INSTRUMENTS.

The question as to whether our Government should impose a duty on all surgical instruments and appliances imported, is one of deep interest to all the members of the profession. It is a fact generally admitted, that no profession at the present day does as much work for charity, both within and without eleemosynary institutions, as ours. True, work done in hospitals and kindred institutions is generally undertaken with the idea of obtaining for the physician or surgeon a wider scope and larger field of operation whereby he may add to his stock of knowledge, and advance as well the interests of his profession and of science, as his own. Outside charity practice is by no means so satisfactory. There the medical attendants have to combat poverty, ignorance, want of proper nursing and all the kindred enemies to scientific treatment, so that few do such work for any other reason than that common humanity demands it. In no other profession, perhaps, is the need of skilled labor so urgent, as in that of medicine. It would be useless to continue this argument, for both the profession and the public know that every doctor does a great deal of work for which he never expects to be remunerated, in this world at least. When it is a matter of giving his time and professional skill, the doctor is in a certain sense bound to fly to the aid of the distressed, whether he expects to be paid or not; but it is surely too much to ask him to spend his substance in the purchase of expensive instruments and appliances for the performance of operations done for charity. The surgeon is especially hardly dealt with in this respect, for not only does he give up his time and rest, to assuage the sorrows of the poor, but he also runs the risk of ruin, professional and financial, by suits for malpractice brought against him, when in the vast majority of cases, the whole blame for untoward results rests with the nursing the patient receives. Perhaps to avoid such untoward results he should be expected to supply a nurse, proper food and all the many surroundings, which go to make up a suitable environment for a patient. Thackary cannot be said to take an optimistic view of mankind, yet he gives us a type of a *Dr.* in *The Adventures of Philip*, who not unfrequently left with his poor patients half guineas as well as boluses; and we believe that the type has not disappeared. Why then should we be made to pay nearly twenty-five per cent. more for our instruments than we should have to do if this impost were not exacted. The question of Canada ever producing surgical instruments as one of the industries of the country, is surely out of count. No one could for a moment entertain the opinion that we can manufacture our own instruments as cheaply or as well as they can be manufactured at the great centres in Great Britain and the United States. So that the only other apparent reason why this vexatious duty should be imposed is the revenue returned by it. It seems to us that to argue the justness of such a tax, levied directly on medical men, is impossible. The reasons why this duty should be removed are numerous, and patent to any one with an ordinary intelligence. The young practitioner suffers from the want of a proper outfit, which can only be obtained by the favored few who have considerable capital at the commencement of their practice. The vast majority, therefore, of our young men are handicapped at the outset, by insufficient equipment for their professional duties. This, though a great evil, is perhaps not

the greatest one which results from the outrageous price of the goods we are speaking of. A greater, is the lack of proper treatment which the poorer classes suffer, owing to the scarcity of proper instruments. How many medical men, in the country especially, can recall cases in which health and comfort have been lost, and even life sacrificed, owing to want of perfect instruments and appliances. We believe that the aggregate of suffering and loss of life, and consequently loss of wealth to the country would be appalling in its magnitude if such aggregate could be set forth. Now the removal of this tax will not give every practitioner a good outfit, but it will enable men with slender means to purchase goods for about three-fourths the price they now pay, and we might reasonably expect to see a corresponding improvement in the working tools of the profession, which could not fail to be a direct benefit to the public at large. We intend to call attention to this matter in a future issue, and in the meantime shall be glad to have the opinion of members of the profesion, whether for publication or otherwise.

RECORCINE IN WHOOPING COUGH.

This remedy has been extensively employed during the last few years in the treatment of whoopiug-cough, with very good success. Dr. Moncorvo, of Rio de Janeiro, was among the first to bring the treatment into general notice. He strongly advocated the topical employment of resorcine in the strength of a one per cent. solution, applied by a fine pencil-brush to the larynx. He gives the following as his general conclusions on on the subject:

1. That whooping-cough—whose nature, up to a very recent period, has been subjected to the most diverse interpretations, in relation to its genesis—may, to-day, according to the latest microscopic researches, be included in the class of parasitic diseases. 2. That the disease appears attributable to the presence of micrococci which multiply prodigiously in the hyperglottic vicinity of the larynx, infiltrating its epithelial cells, which appear to be the predilective seat of their development. 3. That resorcine, applied to the laryngeal mucous membrane, caused, in all the cases in which it was employed, rapid decrease of the number of the paroxysms, moderation of their intensity, and finally recovery in a short period of time, without the aid of any other medication whatever.

Dr. Moncorvo says that resorcine, owing to its much less caustic action and the absence of disagreeable taste and odor, is far preferable to carbolic acid. He has administered it internally to children, even the newly born, suffering under diarrhœa and dysentery. He advises that strict attention be given to the quality; and he recommends that prepared by Monnet, of Geneva, which is of notable whiteness, and in the form of silvery bright crystalline needles. It is extremely soluble in water. Dr. M. recommends the topical application with a fine pencil-brush, to be repeated every two hours. The first applications, he says, sometimes exacerbate the coughing fits, but this irritation ceases in two or three days. In twenty cases treated by him, he was not disappointed in his expectation in a single instance; and some of them had been very obstinate, or even dangerously complicated, as with hereditary syphilis, threatened hydrocephalus, pulmonary tuberculosis, intermittent fever, etc. This drug being a congener of carbolic acid, no doubt acts in a similar manner as a parasiticide. Dr. Moncorvo states that he has, by numerous microscopic examinations of the sputa expectorated by his patients suffering from whooping-cough, verified the statements made by Letzerich, Henke, Steiner, Hagenbash, and other writers, as to the parasitic character or complication of the disease. The treatment advocated by him is, therefore, free from all insinuation of empiricism, and, as the article is not expensive, it will no doubt soon be largely sought after if experience prove the correctness of the drug to claims for it.

DIFFICULTIES SURROUNDING A COUNTRY PRACTICE.

The difficulties which beset the practitioner in the country are very well shown in the following correspondence to the *N. C. Med. Jour.*, who compares laparotomy in New York City and in North Carolina:

"These men, teaching in the great hospitals here, are great men and great teachers, and far be it from me to take one jot or tittle from their merited honor, but oh, how great are their opportunities! If a big operation is to be done in New

York, the surgeon can familiarize himself with the parts by immediate dissection. He is supported by able counsel, aided by trained assistants, and last, but by no means least, he goes into the operation without feeling if his patient die he will be looked upon as a sort of semi-murderer; for, if an unfortunate result follow, it is quickly forgotten in the hurry and innumerable death-rate of the great city. But with us, how different! A great emergency arises—a serious operation must be done immediately, and at best one can rarely obtain more than one professional assistant. Ofttimes the assistant will be a common laborer, the best light obtainable a pine-torch or kerosene lamp minus a chimney, and with a paucity of instruments, because too poor to buy a complete outfit, the surgeon gropes his way through delicate tissues till the work is done and the life of his patient is saved. I recall to mind now a case of successful laparotomy done for gunshot wound of the abdomen, and reported at the last meeting of our medical society, in which I am reliably informed the operator had only the assistance of a negro field-hand and worked solely by the light of a pine-torch."

This will strike a responsive chord in the breast of many of our readers. There is no doubt that men have risen to greater heights in moral courage in attempting operations in the country than do our specialists in the large cities, and have performed noble deeds and saved lives under the most trying circumstances in which medical men can be placed, and yet neither the world at large, nor even the medical profession knew of them. Our country friends are, speaking broadly, either too modest or too careless to report interesting and instructive cases in their proper place, viz., the medical journals of their country.

"He who great ends by little means attains"

is worthy of all honor, and if he will but let the world know of the great ends attained can not fail to obtain his meed of praise and renown.

ONTARIO MEDICAL ASSOCIATION.—The following is a list of papers received by Dr. White, the Secretary, up to the time of going to press.

Papers by guests:—Dr. Wyeth, New York, "Plastic operation for closure of urethra, rectal fistulæ, and intestinal sutures." Dr. A. W. Johnstone, Danville, Kentucky, on "Soft myoma." Dr. C. C. Rice, New York, ————

Papers by members:—"Neurasthemia," Dr. D. Clark; "Coroners' inquests," Dr. J. H. Richardson; "Bacteria, their influence upon the blood and tissues," Dr. C. Sheard; "Pessaries, their range of usefulness," Dr. Temple; "Intestinal sutures in gun-shot wounds," Dr. Oldright; "Laparotomy in intestinal obstruction," Dr. McFarlane. Discussion in Surgery,—"Urethral discharges," Dr. Grasett; discussion in Medicine,—"Malaria as a cause of disease," Dr. Mullin, Hamilton; discussion in Obstetrics,—"The diagnosis of obscure pelvic ailments," Dr. A. A. Macdonald; discussion in Ophthalmology,—"Some affections of the eye of interest to the general practitioner," Dr. Burnham. "On the so-called moral insanity," Dr. Workman; "Idiopathic glossitis," Dr. Hunt, Clarksburg; "Congenital goitre," Dr. Mackenzie, Wingham; "Treatment of inguinal hernia," Dr. Robinson, Brampton; "Compound fracture of humerus, illustrating extension as secured by a new modification of Sayre's short hip splint," Dr. C. M. Smith, Orangeville; "Rest in neurasthemia," Dr. A. H. Walker, Dundas; "Notes on Physiology, of 1887, of clinical interest," Dr. McCallum, London; "Craniotomy," Dr. Harrison, Selkirk; "Intubation of the larynx," Dr. Stark, Hamilton; "Empyema," Dr. Whiteman, Shakespeare; "Antiseptic treatment of wounds of the hand," Dr. Olmstead, Hamilton; "Operations on bone," Dr. Dupuis, Kingston; "Leucocythæmia," Dr. McPhedran, Toronto; "Life Insurance, and the relations of the profession thereto," Dr. Thorburn, Toronto; "Uterine electrolytic apparatus," Dr. A. M. Rosebrugh, Toronto; "Puerperal eclampsia treated with pilocarpine," Dr. Irving, Kirkton.

The guests of the Association this year are:—Drs. C. C. Rice and G. W. Fox, delegates from N. Y. State Med. Society; Wyeth, Gill Wylie, Leonard Corning, of New York, and A. W. Johnstone, of Danville, Kentucky.

Several of the Montreal men are expected at the meeting; they are always welcome. It is expected that our Ottawa confrères will be out in full force. The list of papers, so far, shows a marked predominance of surgical subjects. Where are the gynæcologists?

Extensive preparations are being made by the Committee of Arrangements to provide for what they expect to be the largest meeting of the Association ever held; certainly there is abundance of material to present.

The Constitution and By-laws are being printed again, with the addition of the "Code of Ethics," under one cover; an excellent idea.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.

Primary.—Honors, L. F. Baker, E. Ball.

Passed.—A. G. Aldrich, E. H. Adams, J. S. Agar, D. Archer, Miss M. Agar, H. F. Amall, C. W. Allingham, T. A. Beaman, G. T. Bigelow, Miss M. Brown, E. J. Boyes, Miss S. P. Boyle, G. D. Cram, W. J. Campeau, C. P. Clark, C. B. Coughlin, F. R. Clark, D. W. Campbell, C. W. Clendennan, E. M. Copeland, R. Clannonhouse, G. Chambers, C. B. Carveth, T. S. Cullen, W. H. Clutton, —Clerihewein, R. P. Dougan, S. Douglas, Miss A. Dixon, F. A. Drake, J. F. Dolan, J. E. Forfar, W. J. Fletcher, C. E. Hall, A. B. Field, M. Ferguson, A. Freeland, A. Gaudier, N. D. Gunne, J. B. Gamble, J J. Gee, W. A. Grey, M. E. Gillrie, C. B. H. Haney, J. Holdcroft, D. H. Hutchinson, W. C. Herrman, G. M. Harrison, R. Hill, L. J. Hyttenrauch, Miss M. Hutton, A. T. Hobbs, R. H. Houver, A. N. Hayes, R. M. Hillary, W. Hamilton, J. A. Jay, A. S Ironsides, Miss E. J. Irvine, W. A. Jones, O. L. Kilbain, T. E. Kaiser, W. C. Little, H. O. Lanfear, C. M. Lang, Miss Ida Lynd, A. J. MacAuley, J. R. MacDonald, J. A. MacDonald, M. T. MacFarlane, E. Macklin, W. E. Morrison, R. A. McArthur, W. H. Mulligan, A. J. Macdonnell, O. F. Macdonald, O. E. McCarthy, R. McGee, D. K. McQueen, J. D. McNaughton, J. W. S. McCullough, W. A. McPherson, P. W. H. McKeown, J. S. McCarthy, D. D. McDonald, W. B. Nesbitt, John Noble, C. B. Oliver, R. H. Orton, J. A. Patterson, C. J. Patterson, F. W. Penhall, F. Preiss, W. H. Philip, W. M. Pugh, P. C. Park, L. E. Rice, R. Rowan, T. B. Richardson, E. Reavly, R. W. Rooney, A. L. Reed, C. Sheppard, J. L. Smith, A. M. Spence, R. B. Struthers, R. Striell, H. A. Stewart, G. A. Shannon, J. M. Sifton, A. H. Speers, F. H. Starr, D. Smith, C. L. Starr, W. D. Springer, J. R. Stone, W. J. Turnbull R. Towle, J. F. Wren, N. Walker, H. W. Welch, Mrs. H. A. Walker, F. Walsh, A. F. Walker, H. T. H. Williams, A. A. Weagant, George Wright, F. Zwick.

Final Examinations.—E. C. Arthur, A. E. Ardagh, C. N. Anderson, L. Auld, H. Bowlby, G. Bell, R. Bishop, D. Bechard, W. J. Bradley, F. T. Bibby, E. W. C. Barber, D. T. Bell, L. F. Cline, D. M. Campbell, Miss S. Carson, W. P. Chamberlain, S. Cummings, J. C. Connell, Frank P. Cowan, Miss Agnes Crane, C. P. Conroy, W. J. Campeau, D. W. Campbell, W. H. Chilton, Miss A. Dixon, W. H. Downing, J. M. Eaton, Elizabeth Embury, L. A. Fere, J. H. C. F. Fisher, A. J. Fisher, C. H. Francey, J. G. Ferguson, T. Ferguson, J. C. Grasett, N. D. Gunne, A. J. Hunter, A. N. Holson, J. F. Hart, W. H. Harris, C. W. Haentschell, E. H. Horsey, C. B. H. Haurey, L. J. Hyttenrauch, W. H. Jeffs, D. Jamieson, C. J. W. Carn, D. A. Kidd, J. H. Kennedy, C. B. Langford, B. Lammiman, T. H. Little, Miss A. Lawyer, A. Myers, W. H. Merritt, D. C. Myers, C. N. Mallory, J. H. O. Marling, P. MacNaughton, A. B. Macallum, R. D. Moffatt, C. Morrow, A. J. Macdonnell, A. W. McCordick, J. B. H. McClinton, P. McLaughlin, Miss M. McKay, E. McGrath, M. A. McLaughlin, M. A. McFarlane, J. A. McDonald, L. G. McKibbon, J. McGillaway, D. McLennan, D. R. McMartin, J. G. McCarthy, D. D. McDonald, John A. Neff, T. O'Neil, J. F. Palling, J. C. Patton, Mrs. A. L. Pickering, John Proudfoot, P. C. Park, E. H. Robinson, E. Reavly, M. Steele, W. H. Smith, E. Sisley, J. A. Scott, A. W. Stinson, D. J. St. Clair, R. B. Struthers, O. Taylor, P. W. Thompson, F. G. Thompson, A. F. Tufford, H. B. Thompson, R. E. Towle, J. P. Vrooman, J. S. Wardlaw, T. P. Wier, G. R. Watson, R. E. Walker, A. W. Whitney.

UNIVERSITY OF TORONTO.

Medals—Gold, G. A. Fere; *Silver*, J. Galloway.

Scholarships—Third year—1. J. H. Collins; 2. G. Chambers. Second year—1. L. F. Barker; 2. W. H. Philp. First year—1. J. A. Henderson, W. N. Barnhart, æq.; 2. R. L. Langstaff, T. W. Schlenker, æq.

M.D.—M. H. Aikins, C. H. Britton, P. H. Bryce, J. H. Burns, W. Cornell, W. B. Duck, J. Ferguson, J. G. Head, P. G. Meldrum, A. A. Macdonald, G. R. McDonagh, L. McFarlane, A. F. McKenzie, C. McLellan, G. A. Pettigrew, S. B. Pollard, E. Prouse, J. W. Ray, W. T. Robson, J. F. W. Ross, A. Scott, G. M. Shaw, S. B. Smale, A. Taylor, R. J. Trimble, J. E. White and A. H. Wright.

M.B.—W. C. Barber, George Bell, F. T. Bibby W. H. Clutton, S. Cummings, F. J. Dawson, G. A. Fere, J. G. Ferguson, T. A. Ferguson, J. Galloway, J. Grant, W. Hamilton, T. A. Hardie, G. F. Jones, C. B. Langford, T. H. Little, J. T. Manes, J. McGillawee, Anthony Ochos, J. C. Patton, J. A. Scott, E. Sisley, W. H. Smith, A. W. Stinson, P. W. Thompson, R. E. Towle and T. P. Weir.

VICTORIA UNIVERSITY.

M.D., C.M.—Geo. Bell, Samuel McKibbin, John S. Hart, Robert K. Anderson, Chas. B. Langford, Albert W. Stinson, M. E. Gillrie, Thos. H. Little, Geo. A. Dickenson, P. W. Thompson, Jas. A. Cross, Thos. A. Ferguson, G. Silverthorn, J. J. Broad, T. P. Weir, Frank J. Dawson, Wm. C. Barber, John Carruthers, Geo. F. Jones, Silvester N. Young, John Grant, Thos. Webster, R. G. Montgomery, J. C. Patton, W. C. Gilchrist, Geo. R. Watson, J. G. Hutton, D. H. Piper, Walter Hamilton, F. W. Kitchen, J. A. Ross, Opie Sisley, J. A. Millican, J. Tyrrell, J. McGillawee, Lambert Watson, F. J. Bradd, W. R. S George, Thos. Bulmer.

Primary—J. L. Turnbull, J. A. Ivey, Cole, E. Bull, A. G. Aldrich, T. E. Kaiser, R. C. Dougan, B.A., A. B. Field, J. D. McNaughton, C. W. Clen-

dennan, W. E. Gimby, J. E. Forfar, C. D. Lockyer, J. H Gimby, M. Armstrong, S. Douglas, R Rowan, A. A. Smith, J. S. Harris, J. S. Tweddle.

UNIVERSITY OF MANITOBA.

M.D.—A. D. Carscallen, J. E. Gemmel, C. J. Large, V. E. Latimer, J. P. McIntyre, A. Sibbitt. *C.M.*—J. E. Gemmel, V. E. Latimer, C. J. Large. *M.D. (ad eundem gradum)*—R. J. Blanchard, M. B., C.M, (Edin.); J. W. Good, M.B. (Tor.); H. A. Higginson, M.D., C. M. (McFill); and Drs. Patterson, O'Reilly, Higginson and McArthur took the degree of C.M. *(ad eundem gradum.)*

Scholarships, etc.—Final—1. University Scholarship and Lafferty Gold Medal, C. J. Large; 2. University Scholarship and Boyle Scholarship, J. E. Gemmel. *Primary*—1. University Scholarship J. O. Todd; 2. University Scholarship, T. J. La-

McGILL UNIVERSITY, MONTREAL, M.D., C.M.—Neil D. Gunne, Seaforth, Ont., *Holmes Gold Medalist;* William Grant Stewart, Arundel, Me., *Prizeman;* Charles Peter Bissett, River Bourgeois, N. S., *Sutherland Gold Medalist;* Robert Edward McKechnie, Winnipeg, *Prizeman in the Primary.*

Baer, D. C., Bell, J. H., Berry, R. P., Bradley, W. J., Cameron, J. J., Carter, E. H., Castleman, A. L., Chalmers, W. W., Clouston, J. R., Conroy, C. P., Desmond, F. J., Dewar, C. P., Ferguson, W. D. T., Fritz, H. D., Goodwin, W. W., Gunne, N. D., Haentschel, C. W., Hewitt, J., Hoare, C. W., Haldimand, A. W., Hopkins, H. J., Hubbard, O. H., Kennedy, J. H., Kenney, F. L., Kincaid, R. M., Kirkpatrick, E. A., Lang, W. M., Metcalfe, F. T., Moffatt, R. D., Morrow, C., McDonell, A. E. J. McDougall, D. S., McCarthy, J. G., McFarlane, M. A., McKinnon, G. W., McLennan, D., McMartin, D. R., Orr, A. E., Orr, J. E., Park, P. C., Pearman, H. V., Potts, J. M., Quirk, E. L., Robertson, A. G., Stewart, A. D., Stewart, W. G., Springle, J. A., Thompson, J. H., Weagant, A. A., Westley, R. A., Wetmore, F. H., Woodruff, T. A., Wylde, C. F., Young, H. E.

THE LOMB PRIZE ESSAYS.—Mr. Henry Lomb, of Rochester, N. Y., offers, through the American Public Health Association, two prizes for the current year, on the following subjects: "Practical Sanitary and Economic Cooking Adapted to Persons of Moderate and Small Means." First prize, $500; second prize, $200. Conditions: The arrangement of the essay will be left to the discretion of the author. They are, however, expected to cover, in the broadest and most specific manner, methods of cooking as well as carefully prepared recipes, for three classes,—(1) those of moderate means; (2) those of small means; (3) those who may be called poor. For each of these classes, recipes for three meals a day for several days in succession should be given, each meal to meet the requirements of the body, and to vary as much as possible from day to day. Formulas for at least twelve dinners, to be carried to the place of work, and mostly eaten cold, to be given. Healthfulness, practical arrangement, low cost, and palatableness should be combined considerations. The object of this work is for the information of the housewife, to whose requirements the average cook-book is ill adapted, as well as to bring to her attention healthful and economic methods and recipes. All essays written for the above prizes must be in the hands of the Secretary, Dr. Irving A. Watson, Concord, N. H., on or before Sept. 15, 1888. Each essay must bear a motto, and have accompanying it a securely sealed envelope containing the author's name and address, with the same motto upon the outside of the envelope. All papers must be in the English language.

THE ADDITION OF AN ACID TO BICHLORIDE SOLUTIONS TO INCREASE THEIR ANTISEPTIC POWER.—Dr. Laplace (*Med. Rec.*) has made a number of experiments to determine whether sublimate dressings such as gauze, cotton, rollers, etc., were really aseptic and antiseptic. He found that while most of the dressings were aseptic, none of them exerted positive antiseptic powers. It has been proven by numerous investigations that when the sublimate solution is brought in contact with albuminous fluids, an insoluble albuminate of mercury results, which is entirely devoid of antiseptic properties. This takes place when sublimate dressings are applied to the body, and explains the poor results obtained from their use in some cases. Laplace found that the addition of an acid to the sublimate will prevent this coagulation. He especially recommends tartaric acid.

The following are his conclusions:

1. Acid solutions of corrosive sublimate exert the full effect of the drug, even in albuminous fluids. 2. The conbination of an acid with the sublimate increases its antiseptic powers, so that weaker solutions are required. 3. The acid sublimate dressing does not interfere with the employment of other measures—caustics, iodoform, etc. 4. The acid sublimate solution and gauze gives

more satisfactory results in the laboratory and in practice than other disinfectants. 5. The wounds are not irritated.

The solution employed by Laplace is the following:

Hydrarg. bichlor.,	1.0
Acid tartaric,	5.0
Aq. destil.,	1000.0

Gauze, cotton, etc., are soaked for two hours in a solution of

Hydrarg. bichlor.,	5.0
Acid tartaric,	20.0
Aq. destil.,	1000.0

The author obtained very satisfactory results with this dressing in the treatment of suppurating wounds. The fetor rapidly disappeared, granulation was established, and the dressing remained sterile, in one case for six days.

ANOTHER NEW HYPNOTIC—SULPHONAL.—This is the name given by the manufacturers of "diethylsulphondimethylmethan" to a substance produced by the union of ethylmercaptan with acetone. It was discovered by Prof. Bauman, of Freiburg. Prof. Kast, of Freiburg, has experimented with it on a considerable number of patients, and he says *(Berlin Klin. Woch.)* that in his opinion it is a very valuable addition to our materia medica. It is a crystallizable substance, forming large colorless tables, possessing neither taste or smell. It is soluble in water, about 18 parts of boiling and 100 parts of cold; in alcohol and alcoholic ether it is freely soluble, but is not affected by acids or alkalies. From 30 to 60 grains may be taken by adults without producing any unpleasant symptoms or after effects. Usually the patient sinks into a quiet slumber in from a half, to two hours, and this state lasts from five to eight hours. In a few cases the patient complained of feeling tired and sleepy next day, but usually no after effects were noticeable. It was most efficacious in insomnia in nervous subjects, the dose being about 30 grains. The rate of the pulse, blood pressure, temperature and digestion were not at all affected by medicinal doses.

TEMPERANCE OF JEWS.—Dr. Norman Kerr, the celebrated writer on the physiological aspects of intemperance, in referring to the above, says: "The temperance of the Jews is proverbial. Extensive as my professional intercourse has been with them, I have never been consulted for inebriety in the person of a Jew, while my advice has been sought for this complaint by a very large number of Christians. In my opinion, their general freedom from inebriety, in almost every clime and under almost all conditions (there are very few exceptions to this rule), is as much due to racial as to hygienic, and more to racial than to religious influences."

FORMULA FOR DYSMENORRHŒA.—Dr. Goubert *(Am. Jour. Med. Sciences)* recommends the following:—

R.—Iodoform,	gr. ij.
Ext. of belladonna,	gr. ss.
Asafœtida,	gr. iv.

M. ft. pil. j. Six of these pills are given daily, and from six to ten days before the appearance of menstruation.

STUDY OF OBJECTS.—Examination.—Professor: "How many legs have insects?"

Candidate: "65 per cent. of insects have no legs at all, 11 per cent. have one, 14 per cent. two or three, 10 per cent. four or five, but one six."

Professor: "How in the world did you get this answer?"

Candidate: "By carefully examining the collection belonging to the University."—*Fliegende Blat.*

A MICHIGAN doctor, says the *Medical Age*, paralyzed a company one very wet and slippery night by stating, in reply to the question whether he had come afoot, that he had not, but had adopted the same mode of locomotion that Baalam employed centuries ago.

BY referring to the advertisement of Fairchild Bros. & Foster, on our last page, it will be seen that so great an authority as Dr. Murrell, F. R. C. P., speaks of their Pepsin in the highest terms. The profession here are generally agreed that their Pepsin product is up to the highest standard of excellence.

BRITISH DIPLOMAS.—Dr. P. D. Goldsmith (Vict. Univ.), of Campbellford, Ont., has recently passed the L. R. C. P. London examination, as also that of the Society of Apothecaries.

J. H. Stewart was fined $100 and costs, May 18th, at the Toronto Police Court, for practising

medicine without a license. His wife who was charged with a violation of the Ontario Medical Act was discharged.

REMITTANCES to this journal should be addressed, Charles Sheard, M.D., 314 Jarvis Street, Toronto If otherwise addressed they are late in being acknowledged.

DR. THOMAS KEITH, the celebrated gynæcologist, has removed to London.

Books and Pamphlets.

THE SURGICAL DISEASES OF THE GENITO-URINARY ORGANS, INCLUDING SYPHILIS, by E. L. Keyes, A.M., M.D., Professor of Genito-Urinary Surgery, Syphilology and Dermatology in Bellevue Hospital Medical College, etc. D. Appleton & Co., New York. W. J. Gage & Co., Toronto. Price $5.

Professor Keyes has now become so well and favourably known in connection with genito-urinary surgery, that any work bearing his name is sufficiently recommended, and we are sure this new revision of Van-Buren and Keyes' text book is quite up to any work upon the same subject heretofore produced. We can recommend it highly because it is a complete treatise of the diseases of the genito-urinary system, including syphilis, and further, on account of the able and practical manner with which the subject is handled. Any one who will carefully read the pages of this work will find his time has been well spent.

A TREATISE ON DISLOCATIONS. By Lewis A. Stimson, B. A., M. D., Professor of Clinical Surgery, in the University of New York, etc., etc. One hundred and sixty-three illustrations. Pp. 541. Philadelphia: Lea, Bros. & Co. Toronto: Hart & Co. Cloth, $3.00; leather $4.00.

This volume on dislocations is a companion or second volume to a treatise on fractures, by the same author, published nearly five years ago. This long time has been spent by the author in collecting and arranging from all available sources material for the work. The work on Fractures has taken a place as authoritative, and we have no doubt that the present volume will be equally well received. It is indeed all that can be desired, for the use of the practitioner, and we can heartily recommend it to the profession as a work that will become a classic on the subject under consideration.

ASEPTIC AND ANTISEPTIC SURGERY—A practical treatise for the use of Students and the General Practitioner, by Arpad. G. Gerster, M.D., Prof. Surgery at the New York Polyclinic, Visiting Surgeon to the Mount Sinai Hospital, and the German Hospital, New York. Illustrated with two hundred and forty-eight engravings and three chromo-lithographic plates. D. Appleton & Co., New York. W. J. Gage & Co., Toronto.

This is a clear exposition of the principles of antiseptic surgery, where the steps of the various operations in surgery are concisely given; unfortunately the plates are mostly photographic and hence not so distinct as they might be. We can recommend the work as being up to the day and practical.

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE. For the Use of Physicians and Students. By James Tyson, M. D., Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania. Sixth Edition, revised and corrected. With a colored plate and wood engravings. Pp. 253. Philadelphia: P. Blakiston, Son & Co. 1888. Toronto: Williamson & Co.

This work which has reached its sixth edition is worthy of all commendation. It has been, as the author says, rather cut down as to its contents than enlarged, and considerable matter which appeared in the last edition has been cancelled as being no longer required. The most important additions are in the way of new test for sugar by phenyl-hydrazin hydrochlorate, and alpha naphthol and thymol. Dr. Tyson's name has become like a household word in the domain of urinology, so that any further favorable notice of this most excellent work is unnecessary.

THEINE IN THE TREATMENT OF NEURALGIA. Being a physiological contribution to the therapeutics of pain. By Thomas J. Mays, M. D., Professor of Diseases of the Chest, in the Philadelphia Polyclinic, etc. Pp. 84. Philadelphia: P. Blakiston, Son & Co. Toronto: Williamson & Co. 1888.

This is a reprint of a contribution to the *Polyclinic*, Sept., 1887. The therapeutics of pain are well treated of by a reliable man, and the physiological action of Theine and its special therapeutical indications are well made out.

THE CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE, CRITICISM AND NEWS.

VOL. XX.] TORONTO, JULY, 1888. [No. 11.

Original Communications.

OPERATION FOR CLOSING URETHRO-RECTAL FISTULÆ*

BY DR. WYETH, NEW YORK.

I desire to lay before you the brief history of a case of *urethro-rectal fistula*.

CASE I.—J. S., native of Texas, 27 years old, merchant, came under my care in August, 1887. He came of healthy stock, and had had no sickness of a serious character until 1883, when symptoms of vesical calculus supervened, and for which a left lateral lithotomy was done in August, 1886. The stone removed was reported to be the size of a hen's egg.

A urethro-perineal fistula remained after this operation, and from August, 1886, to August, 1887, four attempts were made to close this opening without success. In the last of these operations a drainage tube about one and one-half inches in length was inserted in the perineal opening and left with the deep end in the urethra. This tube, about three-sixteenths of an inch in diameter, was lost sight of and the doctor and patient supposed it had escaped externally and had been thrown away with the dressings. The last operation was followed by considerable pain which was persistent. In the course of three months an abscess opened into the rectum through the anterior wall, and the urine began to flow freely in this new channel. About this time the perineal opening was closed and an abscess formed in each tunica vaginalis. These were incised and when I first saw the patient were entirely healed. At this date (August, 1887) nearly all of the urine passed through the rectum. The patient suffered greatly, and had to be kept constantly under the influence of opium.

* Read before the Ontario Medical Association at Toronto, June, 1888.

An examination per rectum revealed the presence of a stone, the end of which was on a level with the anterior surface of the rectum, about one inch beyond the anal aperture. The opening was slightly dilated and the stone was removed through the rectum, by means of a strong forceps.

It had formed in and upon the drainage tube, and is seen in natural size in Fig. 1. After consultation with Dr. Edward L. Keyes it was

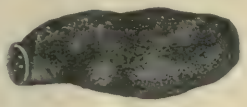

FIG. 1. Calculus formed on a piece of drainage-tube as a nucleus. (Actual size.)

determined to prepare the patient for operation, which was done, and on Sept. 13, 1887, I operated as follows:

The patient, in ether narcosis, was placed in the Sim's position and a large Sim's vaginal speculum was introduced. The opening through the anterior wall of the rectum measured three-quarters of an inch in length, with an irregular width of from

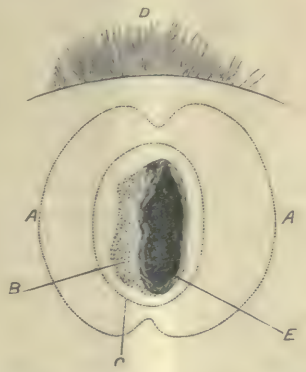

FIG. 2. Showing the anterior wall of the rectum, and opening into it at *E*, a sinus from the membranous and prostatic urethra. *B* Cul-de-sac, which undermined the right margin of the opening. *A A* Line of incision along which the flaps were dissected as far inward as *C*. For their nutrition the two lateral flaps depended upon the limit between the dotted line *C* and the margins of the opening *E*. *D* the perineum.

one-eighth to one-fourth of an inch. It led directly into the urethra near the junction of the membranous and prostatic portions. The floor of the urethra was entirely destroyed The right edge (patient's right) of the opening was seen to be undermined, as shown by the dotted surface *B*, in Fig. 2.

I determined to attempt the formation of a new

floor to the urethra by turning the mucous membrane of the rectum into this position. Two crescentic incisions were made, as shown at *A*, *A*, Fig. 2, being about parallel with the edges of the opening but approaching more closely at its upper and lower angles. These incisions went deep into the wall of the rectum and included the mucous and muscular layers. The two lateral flaps were dissected up the left to within an eighth of an inch of the edge of the opening; the right could not be carried so far on account of the pocket which undermined this side.

The flaps were now turned toward each other and their raw edges made to meet in the middle line, while the raw surfaces looked into the rectum and the mucous surfaces into the urethra (Fig. 3). Sutures of silk-worm gut were inserted, as

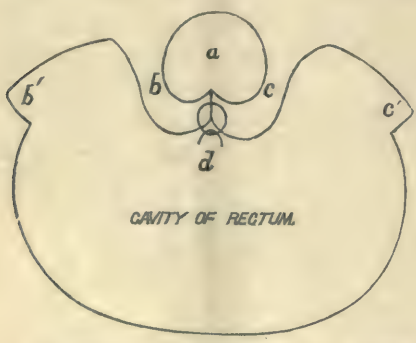

FIG. 3. (Schematic.) Transverse section through the urethra and rectum, showing the method by which the flaps were turned from the mucous membrane of the rectum to make the floor of the urethra. *a* Urethra. *b* The right flap dissected from *b*. *c* The left flap from *c'*. *d* The silk-worm gut suture in position (not entering the cavity of the urethra).

shown in Fig. 3, at *D*. These sutures were about three-sixteenths of an inch apart, and were so inserted that they did not penetrate to the cavity of the urethra. On account of the thinness of the flap at one point I was compelled to pass one suture into the urethra.

A Nelaton's catheter was carried through the meatus and urethra into the bladder, and through this the urine ran out at intervals. Whenever the urine accumulated enough to create a desire to expel it, about six ounces of Thiersch's solution were thrown in to dilute it, and when this with the normal contents of the bladder were evacuated, the same quantity was thrown in again and immediately expelled. In this way the wound was kept practically free from irritation by the urine. Divulsion of the sphincter ani removed all danger or annoyance from spasm of this organ. The bowels were kept quiet for nine days, and liquid diet was enforced. The patient had been placed on liquid diet for ten days prior to the operation.

The sutures were left *in situ*. The wound healed promptly and the patient left for his home in three weeks after the operation. In April, 1888, seven months later, he returned complaining of slight irritation in the rectum, and said he thought at rare intervals a few drops of water escaped into the bowel. On examination three of the sutures were still in position, but no opening could by most careful search be discovered. The sutures were removed and in a few days the patient was discharged.

IDIOPATHIC GLOSSITIS.*

BY DR. HUNT, CLARKSBURG, ONT.

It is generally conceded that Idiopathic Glossitis is a disease of very infrequent occurrence. During a practice of twenty years I have met but with one case, and in the current medical literature of that period I have not seen a single case recorded. Writers of medical and surgical works dismiss the subject after brief notice, but all agree that it is a rare though very formidable affliction. I have, therefore, considered that a report of my case might not be uninteresting to this Association.

The patient was a robust, florid looking farmer, thirty-five years of age, of good family history. He had taken cold and at first complained of soreness of the throat and root of the tongue. The first physician in attendance diagnosed quinsy, and treated him accordingly. In three or four days, as he was decidedly worse, he sent for another doctor whom an officious neighbour recommended as the possessor of a specific for quinsy. He came, he saw, he diagnosed, what by that time was very easily done, inflammation of the tongue, and promised speedy relief. On visiting the patient the following day he pronounced him to be dying. Said, alas! he was too late in being called in. That to open the windpipe was now useless, as his lungs had become too much congested to

* Read before the Ontario Medical Association, at Toronto, June, 1888.

afford him a chance of recovery by the operation, and to lance the tongue was a dangerous proceeding, as fatal hæmorrhage might occur. Giving the man a few hours to live he left him to his fate.

The patient and his friends accepted the situation; but, at the urgent solicitation of another officious neighbour, I was sent for and arrived about 12 o'clock p.m., the same day. I found the patient sitting on a chair by the side of his bed, his face was flushed and turgid, his eyes protruding, respiration hurried and difficult, deglutition impossible, and with a finger of each hand between his teeth to prevent them pressing on the inflamed tongue, and to enable him to get sufficiency of air to breathe. The tongue filled nearly the whole cavity of the mouth, the tip protruding between the teeth. The sub-maxillary and sub-lingual glands and tonsils were tumefied. The saliva appeared to be profusely secreted, and from the inability of the patient to remove it, it was continually dribbling away. He had neither slept nor taken any food for eight days, and his strength was nearly exhausted.

I passed a bistoury on the flat over the dorsum of the tongue, as far back as I could, and then turning it on its edge I made two deep incisions on each side of the raphe. Blood flowed freely, but no pus was discharged. The patient, in a short time, experienced some relief, was able to swallow a small quantity of water and articulate more distinctly. His respiration became easier, and he slept for a few minutes at a time. I remained with him all night administering, at intervals, enemata of egg, milk and brandy, and I left him at 7 o'clock in the morning somewhat improved, but still having much difficulty in swallowing, and being obliged to gargle frequently to get rid of mucus which was very abundant and tenacious.

About 11 o'clock a. m., I was sent for, the messenger saying that during the morning he had discharged some bad smelling matter from his mouth and shortly afterwards appeared to be suffocating. I found him gasping for breath, cyanosed, pulse 140 and feeble, skin covered with clammy perspiration. I proposed to open the air passage, but his friends objected, saying that he was dying and should be allowed to die in peace. I replied that I would hold them responsible for his death unless they allowed me to do as I wished. This threat had the desired effect and they consented. I decided on laryngotomy as being the simplest and speediest operation, time being of the utmost consequence. Not having a tube with me I filed off the beak of a silver catheter and inserted it instead. He immediately began to rally, regained his natural color, and in half an hour was sitting up in bed drinking beef tea and asserting, as well as his tongue would allow him, that the tube was a grand institution. He slept at intervals during the night, and took beef tea fairly well. In the morning I plugged the tube while he was sleeping, and finding that it did not interfere with his breathing I removed it. He continued to improve so much for two days, and the roads being very bad, I left him in charge of the first physician called in, with the understanding that I was to have a report of his condition every day by mail.

He was progressing favorably. The swelling of the tongue was gradually abating, and he could take nourishment with less difficulty, till the third day after I had last seem him, when I was again sent for. I found him labouring for breath, unable to lie down, his pulse indicating great exhaustion. I immediately introduced a tube into the larynx through the old opening, but he died as soon as I inserted it.

I was informed that he had felt better than usual that morning, and had walked from his bedroom to the kitchen adjoining it which opened directly outside. After remaining there for an hour he returned to his room, which, in the meantime, had been scrubbed and was still damp. Soon after his breathing became impeded, and he gradually passed into the state in which I found him on my arrival. For some unexplained reason I was not sent for until six or eight hours after his relapse, and no attempt was made to re-introduce the tube till I arrived.

I must confess I was exceedingly disappointed at the unexpected termination of this case, as, after he had made such good progress towards recovery, I had felt confident that his life would be preserved.

In conclusion, I beg leave to make a few remarks suggested by this case. 1st. Why should Idiopathic Glossitis be of such rare occurrence when, from the large blood supply, active habits, and exposed situation of the tongue it might

naturally be inferred that it would be especially liable to inflammatory action? I must confess I am unprepared with an answer to this question, and have put it in order to elicit the views of this Association. 2nd. From the infrequency of the disease, and the implication of the tonsils and pillars of the pharynx, it is liable, in the early stage, to be mistaken for tonsillitis. 3rd. It is of the utmost importance to early administer nourishment, either per rectum, or by means of a nasal tube, as the disease makes very heavy demands on the vital powers. I think, however, alimentation through nasal tube would be almost impracticable on account of the preternatural irritability of the parts. Early and deep scarifications should be made in order to avert impending suffocation, and, if relief by this means is not speedily obtained, no time should be lost in performing either laryngotomy or tracheotomy, as the exigency of the case might demand, as it allays the fearful apprehension of the patient that he is going to smother, and prevents congestion of the lungs. Finally, having succeeded in carrying the patient through his difficulties, we should continue to carefully watch him till recovery is assured, and not leave to any one else so important a charge, as I feel inclined to believe that had he been prevented from returning to a freshly scrubbed room, or had the tube been re-introduced immediately, a fatal result might have been prevented.

URETHRAL DISCHARGES.*

BY FRED. LE M. GRASETT, M.D., ETC.,
Prof. of Surgery, Trinity Medical College, Toronto.

Mr. President and Gentlemen,—I feel a considerable amount of diffidence in bringing before this Association the subject of "Urethral Discharges," especially as the surgical field is such a rich and fertile one, and the curt manner in which some of these discharges are treated in many text books, suggests to me that I have chosen either a barren portion on which to dilate, or at any rate that the subject is an undesirable if not an undeserving one. All I know, is, that the subject interests me. I give you what I have found of use to me in managing these cases, and I hope that, as this subject falls outside the experience of no practitioner of medicine, the discussion of it by such a learned Associ tion as this may result in good, as it is especiall discussion that is desired, and that the paper b not an exhaustive essay, but rather short sugges tions of points for discussion.

The first of the urethral discharges that claims at tention, is also the commonest, that which is the re sult of catarrhal inflammation, affecting the epithe lium covered surface of the urethra—Urethritis. I is met with under two forms, at least as far as treat ment and apparent cause are concerned. The sim pler, due to contact with some leucorrhœal discharg in the woman, or brought on by excessive sexua intercourse, is usually much less severe, much mor manageable than the specific form. The other, th result of the application of a poison generated b and acquired from the female, miscalled gonorrhœa vulgarly called common clap, or, as the French say chaudepisse, has many points of interest. Now whether the opinion held by Neissir and others i correct, that the virus that produces it is a micro coccus, to which they give the name gonococcus, o is likely to be ultimately shown to be correct, i cannot be said as yet to be anything like proved Capable observers in this comparatively new branc do not appear to be agreed as to the part these organisms play, in exciting this form of urethritis

The probability seems to be, that the constancy with which micrococci are found in gonorrhœal pus, suggests strongly that they are in some way at least connected with the development of the disease. Yet against this, on the other hand, com petent observers have failed to excite a gonorrhœa in healthy persons by the inoculation of the ure thra with cultures of these micrococci. In the pre sent transitional state of our knowledge, as to the exact causative value, in many affections, to be attached to micrococci and other similar germs, I prefer not to dwell on this further, except to say, that from the practical side it has not received that confirmation that one would wish. I refer to an article in the *Brit. Med. Jour.* in 1880, by Watson Cheyne, in which he pointed out, that in the pus discharged during an attack of gonorrhœa, living microscopic organisms are invariably found, and argues therefrom the essentially parasitic ori gin of the disease, and suggests a new method o treatment based on this, viz., the use of bougies o cacao butter, combined with a powerful antisep tic—preferably iodoform and eucalyptus oil. Th

* Read before the Ontario Medical Association, at Toronto, June, 1888.

bougie being preferred to solutions, in order that the antiseptic may stand a stronger chance of being more completely brought into contact with the inflamed surface. I have been unable to find in such journals as I have read, any strong endorsation of this plan. My experience of it is not sufficient to allow me to pass any opinion upon it. I can only say, with my predilection, I wish it were more effectual than it seems to be, as a treatment so easy and rational deserves to be.

In the treatment, we can find an ample field for discussion. As a student, I recollect well how much some used to praise the abortive treatment, effected by the internal use of balsam of copaiba and cubebs, in large and frequent doses, and at the same time the injection of nitrate of silver, or other similar strong caustic fluid, repeated at short intervals. Indeed, one well-known surgeon at the Infirmary, whose eminence in this direction was undisputed, was vulgarly called "The perfect cure in three days."

Few surgeons would now-a-days, I think, undertake the abortive treatment, even at the urgent request of the patient, and his assurance that all risk was his own; for except in mild cases, it frequently does much harm.

The expectant plan has had at times strong upholders, perhaps has some still. I do not find, however, that any of the advocates of this plan have ever brought forward an array of facts to prove that the disease if left to itself will get well in a short time; certainly the majority of those who have studied this disease at all closely, have come to a different conclusion.

What should be embraced in a safe and effectual treatment. Several factors make it up.

(a) Rest, if possible, even to lying in bed. Now few of the patients coming to a dispensary or hospital to be treated, are in a position to do this; they are compelled to go about their work. Even in private practice, a large proportion show the greatest unwillingness to lay themselves up, fearing that the knowledge of their disease may be thereby suspected, if it does not actually leak out.

(b) Insisting on great cleanliness, obtained in any way; the patient to frequently pass urine, so as to cleanse the urethra; injecting warm water; frequent soaking of the penis in warm water. Tell him also not to bandage or tie up his penis in an unnatural position, but allow it to hang, and thus permit the discharge to run freely out of the urethra, the mouth of which should not be firmly pasted up, as it so often is, with a piece of lint; but left open, or at most, having a piece of salicylic or borated absorbent wool lightly placed over it, or in a water-proof bag secured over it.

(c) Make his diet as simple as possible; pure milk diet, if you can get the patient to conform to it; at any rate, excluding all irritating and stimulating articles—fluid and solid, giving also diluents and alkalies freely, to make the urine as little irritating as possible.

(d) Internally, I have used for a long time, the liquor santal flavæ et cubebs of Hewlett, with great satisfaction; it is the most pleasant of an unpleasant family of drugs, and I deem it most useful.

Injections: what is their place and value in the treatment of this state. Certainly in the acute stage they are not beneficial, and I find them positively harmful. A good many cases that I see, come to me after they have treated themselves for a time on prescriptions and advice of a friend, or have been acting under the advice of a chemist. These usually use injections from an early date, often I feel satisfied with bad effects increasing the violence of the complaint and aiding in the extension to the deeper parts of the urinary tract, or producing one or more of the so-called complications or sequelæ of gonorrhœa.

When the acute symptoms are passing off, and the pain has gone, though the discharge may still be muco-purulent, yet I think it is then quite judicious to use astringent injections of various kinds. The list of what has been used and proposed is a long one, and the difficulty of accurately estimating their value is not small; but the zinc salts, sulphate, sulpho-carbolate, nitrate of silver, and boracic acid are certainly most useful, with or without a sedative adjuvant.

The more chronic state of the same affection is deserving of a little attention. The passing off of all symptoms of an acute nature and the persisting of a chronic urethral discharge for a more or less lengthened period, constituting the common complaint known as gleet, is a frequent result. This discharge will often persist, in spite of pains-taking and judicious treatment on the part of the surgeon by internal and local means; at times being reduced to an amount just sufficient to glue

the lips of the meatus together, and the expectation is that it is about to disappear; when, due to some slight cause, some error of diet, some indulgence in alcoholic liquor, it returns again almost to a state of true gonorrhœa This is an universal experience; it tries the patience of the surgeon and his patient to the uttermost.

Why should this be so? Is it because the part from which the discharge comes is so far back in the urethra, that it cannot be thoroughly reached? I think not; for if so, why then do we find strictures, the result of long continued irritation from gleet, situated invariably anterior to the triangular ligament, in the spongy portion of the urethra, probably, most frequently, just at or in front of the bulb; next, not far from the meatus, and, lastly, anywhere in the urethral spongy part. Some surgeons do talk about strictures in the membranous and prostatic portion, but if they are in the membranous they are the result of some injury to the perineum, as by fall or blow, secondarily implicating the urethral canal. The prostatic portion is never truly the seat of organic stricture. Is the explanation of this chronicity to be found in believing that the urethral mucous membrane gets into such a debilitated state, that it is constantly shedding, in an imperfect state, its superficial layer on the slightest provocation? or should we agree with Prof. Otis, and look upon its continuance as an evidence of an abnormal contraction, however slight, of the urethral calibre; in other words, that "chronic urethral discharge means stricture." I cannot go as far as this last statement. I have tested a number of cases, both with olive-pointed and ordinary bougies, and found in many cases that no sign of stricture existed. It is true, I did not use Otis' urethra-meter. Perhaps some member would give his experience with that instrument However, if stricture does exist, it should be combated by appropriate means; more than this, the very passage of large-sized steel bougies in those cases in which I said I could not find evidence of stricture, were benefited by them.

Some cases are managed only by injections, and all cases are in a measure benefited by them; but they should be mild astringent ones, frequently changed.

It is probable that the truth lies as to the pathology in this debilitated state, and that the disease begins in the mucous membrane, extends into the sub-mucous tissue, and continues there very often sufficiently long for the infiltration to become fibrous and make a stricture, while on the surface the epithelial stratum is thickened, the upper or superficial cells of this stratum are constantly dying, exfoliating and mingling with the secretion of mucus from the glands and lacunæ along the utheral tract, and this makes the discharge of chronic gleet, on this basis.

I lately noticed a paper on this, by Lecoper, of Berlin, in which he claims the method he recommends to be tried has the advantages of combining the mechanical and chemical treatments, and I propose to try it at an early date. It is as follows: nickel-plated bougies are used, slightly conical; there are six shallow grooves on them, becoming shallower near the points, before reaching which they cease. Into the grooves of these bougies he pours a paste, which hardens at the ordinary temperature of the air. He tried various forms of paste, containing as the active ingredients, iodoform, zinc, resorcin, and others, but found them all inferior to nitrate of silver; the proportion being, cacao butter, 100 parts; nitrate of silver, 1½ parts; balsam of copaiba, 2 parts. He gives careful directions as to the making of this paste, laying stress on the fact, not to employ too much heat in first melting them, else the nitrate will be reduced to silver and be inefficient. After the salve has become hardened, the bougie is smoothed with any sharp-edged tool. This bougie will readily pass down the urethra. At the temperature of the body the salve melts in one minute.

He maintains no bad effects follow; no chill or fever, or at least no more than an ordinary bougie might produce. The length of time they may be left in varies according to circumstances, but the longer it is left in the more favorable the effect on the infiltration. Improvement begins at once, and in the later stages, when there is little or no discharge from the meatus, by observing the urine in the ordinary way, the character of the discharges found in it will indicate roughly this improvement. Thus, at first, the flakes of matter will contain more pus and fewer epithelial cells; as improvement goes on, the epithelial cells increase in number and the pus cells decrease, until a few only (embedded in the epithelial cells) are seen. It is of course no new idea to employ bougies in these cases, covered with simple salve, or even covered

with a paste which dissolves at the temperature of the body; but in the manner just described, there is to my mind a most happy combination of the chemical and mechanical.

PROSTATORRHŒA, SPERMATORRHŒA.

When several glands discharge their own peculiar secretion into a common cloaca or outlet, it is not easy to say how far the discharge from such common outlet is simple or compound in character, and if compound, to what extent. This difficulty supplies one reason why urethral discharges, other than gonorrhœa, have long been the chosen field of the empiric and the quack. With a proportion, usually very small, of truth to back them up, they delight to paint in connection with such discharges, a picture of misery and woe, the dark coloring of which has done a vast amount of injury, bodily and mental, to multitudes. This dates as far back as the time of Lallemand and his followers, the consequences of whose ill-judged writings are still every day apparent.

Prostatorrhœa as a separate and distinct discharge from the prostate gland, was first described by Dr. S. W. Gross, of Philadelphia; previously, all involuntary discharges were regarded as seminal, and even now writers appear to differ in opinion as to the nature of this discharge. It may be defined as a discharge of clear glairy mucus from the prostate, especially after the bowels or bladder relieve themselves, and more so, if straining efforts have been made. It appears probable that the discharge comes from the acini or ducts of the prostate, over-distended with fluid, due to anything which is likely to produce a determination of blood to the pelvic organs; for example, affections of the rectum, much riding on horseback, masturbation, gonorrhœa. It exists sometimes with or without inflammation of the prostate. Let me give the particulars of one case as an example.

E., single; at the age of 20 had gonorrhœa, and again at 22. It was not until some years after, that he noticed first a discharge of tenacious matter during defecation. General health fairly good. Examination of the discharge was frequently made with the microscope, probably fifty times, but nothing was found except a few columnar and squamous epithelial cells, and on two or three occasions only spermatozoa. The facts pointing to a prostatorrhœa, a large-sized bougie was passed; no stricture was made out, but no apparent benefit followed. It was then passed and left in for about five minutes; within twenty-four hours there was sense of weight and pain in the perineum, sense of fulness and desire to empty the bowel, an indication that a certain amount of prostatic inflammation had been set up. This completely and readily subsided, but the discharge still continued, and the urine showed filiform muco-purulent casts of the follicles and ducts. After a time injection was tried, with a Gross' syringe and solution of nitrate of silver. It produced no pain, only a feeling of warmth; this was repeated on three occasions, at a week's interval; the discharge at once began to lessen, and by the end of a month or so a discharge which had existed for years was completely cured. This patient also had intermittent phosphaturia, great headache at short intervals, and general debility. He has much improved in all these respects since. Tonics were administered liberally, especially iron and nux vomica.

This case serves well to illustrate this disease. It followed irritation at another part of the urethral tract. It showed little tendency to self-cure. Its nature, by the use of the microscope, was readily diagnosed. The treatment was completely successful. I could cite numerous other examples, but my purpose is served if I have shown the necessity for an accurate diagnosis, and the result of certain manner of treatment.

Spermatorrhœa, the escape of seminal fluid, is the last urethral discharge I would briefly mention. In its strict meaning, it is a slight flow of semen, more or less continuous, from the urethra, without any specific sensation, or during an excitation or defecation; but generally it is understood to embrace—nocturnal emissions during sleep, and diurnal pollutions which take place when the patient is awake, and which are excited by slight mechanical or psychical causes, and usually the erection is incomplete and the sensation diminished.

The first class, or involuntary nocturnal seminal discharges, is one variety of this affection; this frequently is but an expression of vigorous health, not feebleness or disease, provided they occur in men living a strictly continent life, and do not recur with too great frequency. They require only that the person be informed that they need give him no concern; but when they occur frequently, and are followed by depression, more or less mental

and bodily lassitude, they are becoming abnormal or pathological, and require judicious treatment.

The local causes leading to spermatorrhœa are most frequently hyperæsthesia and chronic inflammation of the prostatic urethra, induced by masturbation, gonorrhœa, sexual excesses, and the like. But it is chiefly in the direction of treatment that I would direct attention. It is very wise in these cases to lay down strict hygienic and moral rules for the patient. Thus, avoidance of all alcohol; light, simple, nutritious diet. Direct him to empty his bladder the last thing at night, and as early in the morning as possible. Riding on horseback or over very rough roads is not advisable. The mind and body should be given sufficient exercise, to keep the thoughts away from the subject. Habitual constipation is often met with, and requires close attention. Medicinally, bromide of potash is indicated. But chiefly, remove any reflex source of irritation.

If there is an elongated prepuce, with or without phimosis, circumcision is to be performed; in one troublesome case, I found this act most speedily. If the rectum contains any irritation, it should be at once remedied—as external and internal piles, or fissure of the anus. The over-sensitive or chronically inflamed urethra, as in the cases of prostatorrhœa, is best met be the passage of the sound, and the injection of nitrate of silver.

ON THE NECESSITY FOR A MODIFICATION OF CERTAIN PHYSIOLOGICAL DOCTRINES REGARDING THE INTERRELATIONS OF NERVE AND MUSCLE.

BY THOMAS W. POOLE, M.D., LINDSAY, ONT.*

OBJECTIONS TO THIS THEORY.

1. It has been objected to this theory that "a muscle can contract when irritation is directly applied without the intervention of nerves." Now, I am not in the least disposed, or obliged, to dispute this assertion, for reasons which will appear later on. My thesis has much to gain, and nothing to lose, by the fullest admission of the independent irritability of muscular tissue. But it is exceedingly difficult, if not at present impossible, to say when a still irritable muscle has been deprived of "the intervention of its nerves." Certainly such is not the case in the experiments edited by Dr. M. Foster, in the Hand-book heretofore referred to, where the experimenter, in order to produce the ideo-muscular contraction, is to choose "a muscle which has been much exhausted by treatment or by long removal from the body," and to "wait till neither muscles nor nerve give any ordinary contraction with an electric stimulus." It cannot be held to be proven that in such a nerve-muscle there is not still remaining a force in the weakened nerve sufficient to control the equally weakened muscle.

CURARE AND THE MOTOR NERVE ENDINGS.

2. It has also been objected that, while the motor nerve endings are paralyzed by curare, the muscle does not contract, as it ought to do if this theory were correct. To this I have to reply, that if the muscles are not found contracted it is partly due to the insufficiency of the poisoning of the motor nerves, and partly to the fact that curare diminishes the contractile energy of the muscle (*a*). Nicotine and conine act precisely like curare (*b*), and in the final action of these three poisons, motor nerve paralysis and spasm, or convulsions of the muscles, occupy a prominent place. (Ringer). The special results vary, of course, in different animals. Nicotia sometimes acts like an anæsthetic (*c*); and the same is doubtless true of the others. Now, anæsthetics induce muscular relaxation by deoxydizing the blood; and nicotine is known to disorganize the red corpuscles which are the oxygen carriers. It is doubtless in this way that, under the slow action of these poisons, muscular relaxation is brought about. If death be rapidly produced by curare, convulsions occur (*d*). Here the motor nerves are paralyzed before time has been afforded for the poison to lower the irritability of the muscle, which passes into tonic or clonic spasms according to its freedom, thus behaving as it "ought" to do. Is not this a sufficient answer to the objection?

But more remains to be said. The experiments with curare are not so conclusive as to be beyond the reach of criticism. They were intended to

* Read before the Physiological Section of the Ninth International Medical Congress, held in Washington, September, 1887.

(*a*) Rosenthal, Muscles, etc., p. 254.
(*b*) Ib., p. 253.
(*c*) Stille and Maisch, p. 372.
(*d*) Stille and Maisch.

prove the independent irritability of muscle, which is now generally an accepted fact among physiologists. M. Rosenthal asserts that these experiments (and those of Kuhne upon the sartorious muscle), do not prove this; which is equivalent to stating that it is not proved that curare paralyzes the motor nerve endings.

More direct evidence upon this point is that of Dr. Onimus, who, not long ago, "read a paper before the Academy of Medicine, Paris, upon electro-muscular contractility and the action of curare. Contrary to the opinion of M. Claude Bernard, Dr. Oninus believed that curare does not act on all parts of the motor nerves, but only on their trunks;—the nerve centres and terminal filaments being unaffected" (*a*).

In view of these authoritative opinions (and doubtless of others to which I have not access), it is evident that this objection falls to the ground and loses the weight which otherwise might attach to it.

But suppose it were established beyond doubt that the influence of the nerve were completely eliminated from the muscle in any case, and that the contractile protoplasmic masses of muscle were left wholly to themselves, and their life being not yet extinct, that they gave token of that still flickering life when comparatively rudely assailed by a shock of electricity or a corrosive or injurious agent,—what then? Such signs of irritability, elicited under such circumstances, would not militate against my thesis; for such would be the behaviour to be expected from still living protoplasm, wherever found, and would in no way disprove the contention that in the association of nerve and muscle in the organism the *role* of the nerve is to restrain or control the protoplasmic energy of the muscle so long as their mutual relations continue. For, after all, "the contraction of muscular tissue is, in fact, a limited and definite amœboid movement, in which intensity and rapidity are gained at the expense of variety" (*b*).

Indeed, I think the rational view of the situation just depicted, turns the argument the other way; and tends to show that in the joint *role* of nerve and muscle the function of the nerve is *not* to goad or stimulate the muscle to contract. To suppose this is to assign to nerve energy the relative value of the fifth wheel in the coach. Such enduring power of contractility as the muscle here exhibits evidently needs no supplementary aid from the nerve. What it really *does* need, however, is restraint, control and co-ordination for the purposes of the organization of which it is a part.

(*a*) Dr. M. Foster, Phys., p. 63.
(*b*) N.Y. *Med. Record*, 1880, p. 73.

OTHER OBJECTIONS.

A further objection has been suggested, on the ground that on a nervous impulse reaching a muscle, an electric current is generated during the period immediately preceding the contraction of the muscle; but this is an objection which is only of any force on the assumption that electricity is a stimulant. There is nothing in the action taking place here to show that the electric current is a stimulant rather than a paralyzer. There is simply a "freeing of the forces in the muscle," just as the spark of electricity frees the forces bound up in gunpowder, and so fires the train (*c*).

As for the additional plea that nerve force and muscle force are too much alike for us to consider one a paralyzing and the other a contracting agent: that is merely begging the question. Nothing whatever is known regarding the nature of these forces; and the intimate structures of nerve and muscle are so widely different as to justify the idea that the product, so to speak, of each, is equally diverse.

This theory has been objected to as a proposed addition to the inhibitory system of the text-books. This is a mistake. If the views here enunciated were adopted, the huge incubus of the present inhibitory hypothesis could be in great part swept away, to the great advantage both of physiology and therapeutics.

If it be claimed that on the cutting of the spinal cord or of a nerve trunk, the "irritation" set up at the point of cutting, or the generation of electrical current as the result of chemical change in the transverse section, act as a stimulus, and the contraction of the corresponding muscle is thus produced, such a claim must be regarded as untenable for the following reason:—The acts just referred to cannot be stimulating acts, because they are attended by precisely similar effects as are produced in the muscle by death from any cause, in which condition, it is needless to say, nervous activity is not increased. The proof of

(*c*) Rosenthal, p. 250.

this has already been sufficiently vouched for, and need not be repeated here.

Of course, I do not pretend that all difficulties vanish in the light of the theory here advocated. There are very serious, if not insurmountable, difficulties in the theory of the text-books; as the facts of the foregoing pages fully show. What I claim is, that the view here presented rests on a rational basis, and, though presented very inadequately, and under many disadvantages, has the merit of furnishing a key to many obscure phenomena in the organism, and is entitled to the fair and candid consideration of the members of our profession.

NEURASTHENIA.

Abstract of a paper by Dr. D. Clark, Medical Superintendent of the Asylum for the Insane, Toronto, read at Meeting of Ontario Medical Association, June, 1888.

We regret that we are unable to give the full text of this most valuable and instructive essay. The Dr. after graphically describing the condition of the patient suffering from this disease, which, "in medical literature has been given many names, such as cerebrasthenia, brain exhaustion, general debility, nerve starvation, 'run down,' poverty of blood, spinal irritation, and other terms 'too numerous to mention.' This disease is not to be confounded with hypochondria, hysteria, or insanity. "Each of these conditions is well marked and easily discerned by any observant physician. The morbid fears of insanity are usually definite and permanent, and accompanied by delusions, which are fixedly believed in by the insane patient. The neurasthenic, on the other hand, will tell you how unfounded are their extravagant ideas, and that they can temporarily banish these vagaries, but only to return again, like the swing of a pendulum."

He divides the neurasthenic into three classes:

1st. Those who complain of general weariness, becoming easily tired, having poor or capricious appetites, being restless, yet look fairly nourished and healthy.

2nd. Those who are evidently feeble. They are usually pale, thin, and show generally a waste of tissue and a breaking-down without any evident local disease.

3rd. This class contains those in which we find a hysterical condition and anæmia, especially in chlorotic females.

It is strongly urged however, not "to jump too hastily at conclusions lest organic and local disease should exist, the nerve symptoms only being indicative of permanent trouble which may need special and direct treatment." The writer admits having made mistakes in this direction, and has seen many cases in which such mistakes have been made.

"All these phenomena are defects, outside of brain disease, of a permanent character. The identity is not present, but the family resemblance is striking in this brood of evils which border on insanity. The want of sleep, followed by a low power of thinking in the pursuit of daily business; the weakening of the power of attention and a desire to wander from necessary thought; a shrinkage from doing a business which heretofore was a delight; becoming abnormally wearied in mind, when doing routine and ordinary work; not the natural facility to put ideas into words, and an unnaturalness of temper in respect to small matters and on small occasions; and change of manners and feelings to near friends and relatives without any just reason, are cardinal characteristics."

The Dr. goes on to say that "if there is any hereditary taint of insanity, or any serious neurosis existing, then these evidences of physical and mental deterioration are not to be lightly thought of, for any such condition may evoke from latent tendencies active diseases of an alarming character."

. . . . Nerve-starvation is not, however, *a fixed physical disease and does not affect and control abnormally the language and conduct of an individual*, as in insanity.

As to the physical condition "we often find abnormal dryness of the skin and mucous membranes, tenderness of the spine in circumscribed places, as we often find in hysterical women. Complaints of feeling heaviness of the loins and limbs; shooting pains simulating those of ataxy, irritable heart-action, best known by a tremulous, variable pulse accompanied by palpitation and it may be intermissions of beats, mostly the third and fifth beats. Convulsive movements, especially on going to sleep, which have often been mistaken for nocturnal epilepsy; localized hyper-æsthesia; sudden giving out of general or special functions;

temporary paresis, or it may be paralysis, and *generally a feeling of profound exhaustion unaccompanied by positive pain.* Some graphically say: "They have a feeling of *goneness.*"

The treatment of such cases is summarized as follows:

1st. Rest and cheerfulness for the anæmic.

2nd. Outdoor exercise and work for the plethoric and sedative.

3rd. Fresh air, substantial food and absolute cleanliness for both classes, as a rule.

4th. No chloral, no opium, no alcohol; in short, no artificial stimulant, soporific or narcotic, of any kind. Three hours of natural sleep or rest have in them more recuperative power than nine hours of stupor or drugged quietude. Such short cuts to rest only murder natural sleep and strangle the heroic efforts of nature to come back to normal conditions. Even when these stilts are used, it must be after serious and thorough deliberation.

5th. Any employment which will have a tendency to divert the mind away from self-contemplation, and, in short, seeking relief by the law of substitution.

6th. I find the best remedies are such as the arsenites, cod liver oil, zinci phosphidi, ferri pyrophosphate, nux vomica, bromides with caffeine, zinc oxide with ergot, and such like.

These tonics and calmatives assist nature to seek again the old paths. Allow me to add a word of warning to the younger members of our profession. If sedatives, or narcotics, or stimulants are administered, it is well to mask them as much as possible. We all know their seductive power, and I have been told by dozens of victims to the alcohol, chloral or opium habit, that the first knowledge they had of the pleasurable potency of such drugs was received from the family physicians. After their visits ceased the remedy became a luxury, and the druggist was applied to for the material to inflict infinite injury to many a valuable life. My method has been to use some menstruum which would disguise the taste and smell of these drugs and to maintain a stubborn silence as to their presence in my prescriptions. This warning is given here, as there is a great temptation to use them in neurasthenic cases, in which are found insomnia, local pain, and mental distress.

Correspondence

OUR NEW YORK LETTER.

From our Own Correspondent

NEW YORK, June 23rd, 1888.

It is said that America leads all other countries in gynæcology, and the orthopædists of New York think they have reason to say that orthopædic surgery is furthest advanced here. Recently at a meeting of the orthopædic section of the Academy of Medicine, Dr. Ridlow read a paper, in which he advocated the method of treatment of hip disease pursued in England instead of that followed here. The English method might be styled the hospital or rest-in-bed treatment, while that here the mechanical or out-of-door treatment. In London patients with hip disease are put in bed, and extension applied by means of the weight and pulley, the patient being kept in bed until either a cure results, or death ends the treatment. Every orthopædist present at the meeting—except the author of the paper—agreed in strongly denouncing that treatment, Dr. Sayre going so far as to say that to 'return to it would be to go back twenty-five years to the dark ages of orthopædic surgery. Every one here uses some form of splint in hip disease, the most popular, and I think the best, being Taylor's long hip splint. Morbus coxarius being generally believed here to be tubercular, it is very essential that the patients get as much as possible into the fresh air and not become bed-ridden. I will not attempt to describe the Taylor splint or its mode of application, as it would take too long, and the description can be seen in any book on the subject. What is obtained from the splint is that the joint is kept at rest while extension is being made continuously, and the weight of the body removed from the foot to the perinæum the patient enabled to run around, go to school, with very little inconvenience, and without crutches. In the acute stage there usually exists, before the splint has been applied, some flexion of the thigh due to reflex muscular spasm. As long as this exists the patient is kept in bed with leg on an incline plane, and by means of the splint the extension is made in the line of deformity. A few weeks will generally suffice to overcome the flexion, and as soon as this is done the patient gets out of bed and should be out of doors

as much as possible. Pain generally disappears with the application of the splint. The splint is worn day and night, and only taken off to renew the adhesive plaster on thigh and leg—usually once a month, or less frequently. Should abscesses develop, as in a proportion of cases they will, two courses, directly opposite, are advised, Dr. Sayre saying to open the abscess, scrape, irrigate and dress it antiseptically; Dr. Shaffer on the other hand advising to leave the abscess alone and allow it to open spontaneously unless sepsis be produced, or it is about to open in a bad place. About 2% of these abscesses disappear—are absorbed. The splint is finally removed only when all reflex muscular spasm is gone, and the motions free, or anchylosis result. Tonics, cod liver oil are given, and the general health attended to. The mechanical treatment does everything that the weight and pulley does with the tremendous advantage of giving the patient the benefit of exercise out of doors. I have seen numbers of these children running around with their splints on, fat and red cheeked—very few of them becoming cachectic and having amyloid livers and kidneys. The prognosis is generally good as regards recovery, a great many recover-recovering with good motion, though anchylosis is a frequent result. Dr. Sayre has the splint so arranged that the joint is not kept absolutely at rest. Dr. Gibney keeps the joint perfectly quiet, and Dr. Shaffer allows a very little motion. They all have the same end in view, viz: prevention of anchylosis; but Dr. Sayre claims that if the joint be kept for a long time immovable anchylosis will ensue. Dr. Gibney claiming anchylosis will be prevented by keeping the joint at rest, and that anchylosis is more to be feared where the slightest motion is allowed as it keeps up the inflammation.

In lateral curvature of the spine, Dr. Shaffer uses a brace for support and to correct the deformity and keep it corrected. Together with this he employs some gymnastic exercises. Dr. Gibney relies entirely on gymnastic exercise, having the class meet together at certain hours, and he drills them in the exercises which they are to go through at home.

During the past year, Dr. W. T. Bull, surgeon at the New York Hospital, did three operations for cancer of the larynx, one being a unilateral, and the other two complete extirpations of the larynx. In all three cases the operation was successful. Intubation of the larynx in diphtheritic croup is becoming more popular here, the statistics improving as more cases are reported. The statistics now are better than those of tracheotomy.

CANUCK.

Reports of Societies.

ONTARIO MEDICAL ASSOCIATION.

The eighth annual meeting of the above Association was held in the theatre of the Normal School, Toronto, on the 13th and 14th ult., Dr. Rosebrugh, of Hamilton, President, in the chair, Dr. J. E. White, of Toronto, Secretary. The attendance was large and representative. Drs. Wyeth, Rice, Fox and Horning, of New York, Dr. Johnson, of Danville, Ky., Sir James Grant, of Ottawa, and Dr. Gardner, of Montreal, were present as delegates and invited guests. They were introduced to the meeting and Drs. Rice, Fox, Gardner and Johnson made brief speeches.

THE MEDICAL LIBRARY.

Dr. Graham, of Toronto, presented the report of the committee appointed to draft a scheme for the foundation of a library for the Association. The committee had obtained a grant of $250 from the Toronto Medical Association, and the use of a room from the Ontario Medical Council. They formed a stock company known as the "Ontario Library Association," with shares of $5 each, payable in five annual instalments, and had already obtained subscriptions in stock amounting to $4,000. Numerous gifts had been offered from friends in the United States, but these were cumbered by the duty on books, so unjust a tax that the committee urged the members of the Association to agitate for its removal. Although they had not canvassed for books, they had received 800 bound volumes and some 7,000 pamphlets and magazines. In closing, the report appealed to the Association individually and collectively for support.

Dr. Shaw, of Hamilton, moved, seconded by Dr. Mitchell, of Ennisville, that the report be adopted and that the Association donate $100 to the Ontario Medical Library.

Dr. Bruce Smith, of Seaforth, thought that the Association could do better than that, and moved in amendment that the gift be $150, which was seconded by Dr. Smith, of Tilsonburg, when Dr. Shaw adopted the larger sum, which was unanimously adopted. A vote of thanks was passed to the Library Committee, which was suitably acknowledged by its chairman, Dr. Graham.

On motion of Dr. McPhedran, seconded by Dr. Thorburn, a resolution sympathizing with Dr. Dupuis, of Kingston, in the trying ordeal throug

which he recently passed by the unfortunate death of his son, was adopted. Another resolution offering the Association's condolence to the family of the late Dr. Brouse, of Brockville, was also carried.

Dr. A. M. Rosebrugh, of Toronto, brought the morning session to a close by a clear exposition of the use of Electricity in uterine disease. His remarks were listened to with much attention and interest; Apostoli and his disciples having gained such splendid results from the use of this agent, that the profession generally feel a great desire for further knowledge of the practical working of the system.

Before rising for lunch the attention of the Association was called by Dr. Sheard and Dr. Richardson, to the unsatisfactory character of one of the the members. The matter was finally handed over to the committee on credentials to report on.

The President's address was next in order, and was listened to with attention. After thanking the Association for the high honor conferred upon him, the speaker referred at some length to the benefits arising from Medical Associations generally. He spoke of the vigorous strength of this Association and of the good effects it must have on the advancement of medical science in Ontario. He believed the interests of the Association and of science would be subserved by affiliation with the British Medical Association, which is perhaps the most influential scientific body in the world. In giving a history of the advance of mecical science during the past thirty years, he congratulated students of to-day upon the transformation which has taken place in the methods of, and facilities for study. He believed that the students are better now *morally*, as well as scientifically, than they were when he was a student; while empiricism is still rampant, truth and principles are generally becoming evolved out of the chaotic mass of facts known to scientists. Hospital facilities are much increased as are also laboratories and apparatus, giving the student opportunities for *real* improvement, which were unknown even a score of years ago. In his history of the old days of medicine and medical education in Toronto, he introduced the well-known and beloved names of some of the giants of those days, among them mentioning the names of Drs. Widmer, Rolph, Beaumont, King Telfer, Henick and Workman. Dr. Workman was present, and at the mention of his name there was hearty applause, which was repeated when the President said that the "Dublin method" of midwifery, which has been spoken of as a recent discovery, was practised by Dr. Workman forty years ago. The President, resuming, urged that better facilities for scientific research should be provided for students in Canada, so that it would not be necessary for them to go abroad. These facilities being provided, the higher the standard was the better, both for the student and his patients.

SURGERY.

Dr. Grasett, of Toronto, opened the discussion in Surgery with a paper on "Urethral Discharge," which appears in full in this issue of the CANADA LANCET. The discussion of the subject was taken up by Dr. McFarlane, of Toronto; Dr. Graves, of Fergus; Dr. Burt, of Paris; and Dr. Dupuis, of Kingston. In the course of his remarks, Dr. McFarlane said that it was a shame that in the schools of Ontario, pupils should not be warned of the baneful effects of vicious practices.

Dr. Johnson, of Danville, Ky., followed with a paper on "Soft Myoma," which was listened to with eager interest by all present. Diagrams were used in illustration of the subject. The reader showed that this form of uterine tumor is not one of the secondary changes of the hard myoma, due to degeneration of the newly-formed muscular fabric, comprising the ordinary fibroid, but is an entirely distinct tumor springing from a different source, having a separate histological and clinical history, and a widely different termination.

Dr. Burns, the newly elected President of the Ontario Medical Council, and Sir James Grant, of Ottawa, were at this point introduced to the meeting and were received with much applause.

Dr. Sheard read a paper on "Typhoid Fever," which will appear in a coming issue of this journal. It was discussed by Dr. Smith, of Tilsonburg; Dr. Mullin, of Hamilton; and Dr. Henderson, of Kingston.

Dr. Holmes, of Chatham, and Dr. Whiteman, of Shakespeare, read papers on "Empyema," and this brought the afternoon session to an end.

Dr. McCollum, of London, now read an excellent paper, showing the most important advances in physiology during the past year.

SUBJECTS FOR DISSECTION.

Dr. Geikie moved a resolution favoring the modification of the Anatomy Act, so as to secure a more adequate supply of anatomical material, the study of anatomy being the basis of all sound medical education.

Dr. Workman said that forty years ago, in cases of hanging, the profession always got the bodies. Dr. Richardson could perhaps explain what use was now made of them. He did not see why students should have to desecrate graveyards, or why the bodies of decent people should be taken from the hospitals, while the body of a criminal was buried within the gaol walls.

Dr. Richardson said the law requires that an executed criminal must be buried within the precincts of the gaol yard. There was no doubt the profession were deprived of bodies which legitimately belong to them. The supply of material was so limited that students would have to go abroad to seek it, much to the detriment of the Province.

Dr. Geikie said that the demand of the profession was made in the interest of the public. The motion was carried.

Dr. Mullin opened the discussion on Medicine by an able paper on "Malaria as the cause of disease." The paper went to show that there was an undue tendency to attribute disease to malaria, and consequently a too liberal administration of anti-malarial remedies, not always harmless. The paper was discussed by Drs. Geikie, Workman, and Richardson.

Dr. C. C. Rice, of New York, read a paper on "Catarrh and other Nasal Diseases." The paper was illustrated by apparatus. Drs. Palmer and Graham, of Toronto, joined in the discussion.

The report of the Committee on Credentials was presented by the acting chairman, Dr. W. Britton. It recommended that in future the by-laws of the society dealing with the election of members be adhered to, pointing out that the loose manner of receiving members might lead to unsatisfactory results.

A discussion immediately ensued, in which the report was found fault with by some of the speakers, for not bringing in a deliverance on the case of the member accused by Dr. Sheard in the morning of being guilty of unprofessional conduct.

An amendment was carried, referring back the report to the committee for further consideration.

SECOND DAY.

The first paper read was by Dr. Hunt, of Clarksburg, which appears on another page of this issue. It was ably discussed by Dr. McPhedran, of Toronto, Dr. Brock, of Guelph, and Dr. Metherill, of Freelton, who advocated the use of ice in the treatment of the disease.

The next paper was read by Dr. C. M. Smith, of Orangeville, on "Fractures of the Humerus." The mode of treatment advocated was illustrated by the introduction to the Association of a young man whom Dr. Smith successfully treated by the aid of the splint.

Dr. Gardner, of Montreal, read a paper on "Ruptured Tubal Fœtation," which will appear in a subsequent number of this journal.

Dr. Johnston, of Danville, Kentucky, in congratulating Canada on having a scientist like Dr. Gardner, condemned strongly the use of electricity in effecting the death of the fœtus. The knife was the safest remedy.

Dr. Daniel Clark, Superintendent of the Provincial Lunatic Asylum, read an able paper on "Neurasthenia, or Nerve Diseases." An abstract appears in another column.

The Hon. G.W. Ross was introduced at this stage of the proceedings, and made one of his usual happy addresses, which was received with much applause.

Dr. Bray, of Chatham, read a report of a case of "Uterine Hydatids," which was exceedingly interesting.

Dr. McPhedran showed a very interesting case of "Splenic Leucæmia." The patient first came under observation about three months ago. About a month ago the proportion of white corpuscles to red was about 1 to 15. On that day it was about 1 to 8. An interesting point noted, is that while the number of red corpuscles is decreasing, their color is greatly improved, as is also the general condition and feelings of the patient. The spleen is considerably enlarged.

The last business before the noon adjournment was the viewing of an operating table, which was some time ago invented by Dr. O'Reilly, of the Toronto General Hospital. The feature of the table is that the head of the patient is hidden from view while the operation is going on, and in this way students need not necessarily know who the patient may be.

Dr. Thorburn's practical and interesting paper on "Life Insurance and the Relation of the Profession thereto," was next in order. It was listened to with interest and provoked a good deal of discussion.

THE COMMITTEE ON CREDENTIALS.

Dr. Britton, chairman, read the following report, which he said was ready for presentation since the morning:—(1) That it appears in the minutes that the committee of 1887 made a final report, including the names of all candidates whom they esteemed worthy of membership; (2) That the list found in the copy of the constitution and by-laws is a complete collection of the names of members up to the present time; (3) That signing the register and paying the fee do not constitute membership, the constitution having provided for election by voting; (4) That they have compared said list of members with the register of this year, and recommend the following members as eligible for membership. (Here followed a list of names.)

The committee stated that its sphere was confined to passing on the character of those asking for membership, and not to making enquiry into the status and professional conduct of those already members. The report concluded by condemning the mode of admission heretofore in vogue, warning the Association that if laws are not adhered to in the election of members, unworthy members will occasionally creep into the society.

The report was adopted.

Dr. Powell said that the adoption of the report did not dispose of the case of the member complained against on the first day of the session. He wanted to know whether he would receive the membership fee from the said member. He moved that the Committee on Credentials be re-

tained to deal with this case and others, and bring in a report at 4 p.m.

Dr. Miller seconded the motion.

A paper on "The Diagnosis of Obscure Pelvic Ailments" was read by Dr. A. A. Macdonald, of Toronto. The views expressed were discussed by Dr. Yeomans, Mount Forest, Dr. Richardson, Dr. Hunt, Clarksburg, and the President.

Dr. J. A. Temple, of Toronto, read a paper on "The Range of Usefulness of Pessaries," which was followed by another by Dr. Irving, Kirkton, on "Puerperal Eclampsia on the use of Pilocarpin."

COMMITTEE ON ETHICS.

Dr. Barrick read the following regarding the conduct of certain members charged with violating the code:

"Your committee after carefully considering the code of ethics as at present adopted by your association, and which code is really that of the American Medical Association, have come to the conclusion that the time has arrived when the Ontario Medical Association should frame a code of ethics of its own, taking special cognizance of the following points brought under their observation:—(1) That of signs displayed outside of churches or other public places with the names of any practitioner painted on them. (2) That the practitioners employed by the various clubs be renumerated in proportion to the work done. (3) To signs displayed by practitioners outside their houses and to advertisements in the daily papers. (4) To the posting of handbills about the city by practitioners on change of residence. (5) To the advertisement of a certain dispensary for diseases of women in the city, notifying the public that advice was free, and that students were not admitted. (6) Your committee beg to recommend the appointment of a committee to formulate a code of ethics and to report at the next general meeting.

The report was read clause by clause and provoked a great deal of interesting discussion.

In the evening, Dr. J. H. Richardson read a paper on "Coroners' Inquests." After a few preliminary remarks dealing with the gravity of the question, the speaker suggested that a committee of the association should be appointed to elaborate some feasible plan for conducting investigations into suspected cases of death more in accordance with the spirit and conditions of an advanced civilization. He believed that the true functions of the coroner ought to be confined to throwing all the light possible on the cause of death, leaving matters purely legal to gentlemen of the legal profession. As to the medical witness, the speaker was more emphatic, condemning the superficial character of the evidence sometimes given touching the cause of death. The usual practice is to entrust the *post mortem* examination to some medical man known to have been acquainted with the deceased, or to have been in some way accidentally connected with him at the time of death. Too little time is afforded the witness to prepare an intelligent report, and consequently, in many cases, the ends of justice are frustrated. If he should afterwards discover that his opinion as to the cause of death was erroneous, no opportunity of putting the case right may ever arrive. A medical witness should have a thorough knowlege of medical jurisprudence, so that it is not every medical man that can be an intelligent witness of the cause of death in cases involving intricate details. As to the coroner's jury, the speaker said that he had not respect enough for it to give it serious attention. It is absurd to believe that twelve men, sometimes gathered from the most ignorant class, can advance the ends of justice. In the opinion of the speaker the time has arrived when the coroner's jury should be dispensed with.

The views given were discussed at some length by members occupying the position of coroner, such as Dr. Johnston, Dr. Bray and Dr. Duncan. The consensus of opinion was that coroners' inquests are in many cases defective.

The following committee was appointed to consider the subject and report their finding at the next annual meeting of the association:—Dr. J. H. Richardson, Toronto; Dr. Henderson, Kingston; Dr. Johnston, Toronto; Dr. C. W. Covernton, Toronto; Dr. W. Philp, Hamilton; Dr. White, Toronto; Dr. I. H. Cameron, Toronto; Dr. Duncan, Toronto, and Dr. Powell, Toronto,

The committee is enjoined by the resolution to take into consideration the whole subject of medico-legal investigation of violent or suspicious deaths, and to draft a bill embodying proposed changes, which will be submitted to the Ontario Government in the event of the bill receiving the endorsation of the association at the next meeting.

REPORT OF NOMINATING COMMITTEE.

At this stage of the meeting Dr. McPhedran, was asked by the President to read the report of the nominating committee, and is as follows:—President, Dr. W. H. Henderson, Kingston; 1st Vice-President, Dr. Geikie, Toronto; 2nd Vice-President, Dr. Howitt, Guelph; 3rd Vice-President, Dr. Day, Trenton; 4th Vice-President, Dr. Aikman, Collingwood; Corresponding Secretaries, Drs. Lovitt (Ayr), Gillies (Teeswater), Trimble (Queenston), Leonard (Napanee); Secretary, Dr. J. E. White, Toronto; Treasurer, Dr. N. A. Powell, Toronto.

When the President rose to put the motion for adopting the report, Dr. Walker rose and said that he did not believe it was in the interests of the society to retain officers for a long term of years. Such a course, the speaker thought, would lead the

association into ruts and grooves of an unhealthy character. He, therefore, proposed that Dr. White's name as Secretary be replaced by Dr. Wishart's, but with respect to the other officers he did not propose to offer any opposition.

The motion was the signal for a heated discussion on the constitution, many of the speakers maintaining that no person could be elected to an office without his name being brought before the nominating committee, and consequently, that Dr. Wishart could not be legally elected by the course proposed to be taken.

Dr. Wishart asked leave to retire from the contest, but his friends vigorously protesting, he had no other course left him but to continue in the field.

At last a motion was carried adopting the report, office by office, and by ballot

The President did the balloting for the whole association, but when he came to declare Dr. White duly elected, a motion was made referring back the report to the committee with instructions to them to place the name of Dr. Wishart with that of Dr. White for the office of general Secretary.

The motion was carried by a vote of 29 to 15.

Dr. White then rose and, after resigning his position of Secretary, walked down from the platform to the body of the hall. The affair did not stop here, for the President began at once to call for a vote on the two candidates before the meeting. This course called forth vigorous protests from Dr. White and his friends, who declared that he was no longer a candidate. An end was put to the discussion by Dr. Richardson, who moved that Dr. White's resignation be accepted, and that he be tendered the hearty thanks of the society for his services during the last nine years.

The motion was carried, and the President declared Dr. Wishart duly elected Secretary.

On motion, Dr. White was granted an honorarium of $100 for his services during the past year.

The Treasurer's report was read, showing the annual receipts to have been $502, and that there is a balance, after all demands were met, of $227.-59.

The retiring President introduced the newly elected President to the Association, after which the meeting was declared at an end.

The next meeting will be held in Toronto, a report to that effect having been adopted.

ONTARIO MEDICAL COUNCIL.

TORONTO, June 12th, 1888.

The Medical Council met this morning in the new building, corner of Bay and Richmond Sts., the President in the chair. All the members were present, excepting Drs. McArthur and Grant.

The retiring President, Dr. Henderson, now addressed the Council. After comparing the high rank of the medical profession in Ontario with that of the United States and the other Provinces of the Dominion, he spoke of the necessity of medical men possessing not only a sound education, but that they should be characterized by culture and refinement. Circumstances have changed withing the past few years, rendering it no longer necessary that access to a practitioner's license should be easy. He believed in enforcing such tests as will secure for matriculants a preliminary education commensurate with the difficulties to be encountered in the acquirement of the profession, and the dignity afterwards to be maintained. He also believed that it will be a great gain to the profession, if medical students did not increase in numbers for a few years to come. He spoke of the necessity of having more than a mere book preparation, and of the tendency evinced by students to neglect the more practical part of their studies. He believed that, possibly, an extension of time devoted to the study of medicine may be necessary to this end, and that the Council must exercise ths most scrupulous care in guarding, not only the entrance, but the whole course of training, and, finally, the licensing examination, through the meshes of which it shall be utterly impossible for the imperfectly prepared to pass successfully. There should be more efficient clinical teaching, and the population of our large cities should warrant a sufficient supply of material for such purposes.

Dr. James Burns, of Toronto, was unanimously elected President for the current year. The new President, after thanking the Council for the honor done him, requested the Council to elect a Vice-President. Dr. Cranston was unanimously elected Vice-President.

The following are the Standing Committees for 1888-89 :

Registration Committee—Drs. Rosebrugh, Bergin, Campbell, Fenwick, Henry, Orr and Russell.

Rules and Regulations—Drs. Day, Campbell, Fowler, Orr and Williams.

Finance Committee—Drs. Henderson, Philip, Russell, Ruttan, Vernon and Wright.

Printing—Drs. Buchan, Harris, Moore, Vernon and Wright.

Education—Drs. Williams, Bergin, Buchan, Bray, Cranston, Day, Moore, Ruttan, Fenwick, Fowler, Grant, Geikie, Harris, Husband, Logan, Russell and Wright.

Executive—Drs. Burns, Bray and Rosebrugh.

Discipline—Drs. Day, Bray, Logan, Russell and Wright.

June 13th.

Minutes of the last meeting were read and confirmed. After a number of notices of motion on various subjects, Dr. Day presented the report of the Rules and Regulations Committee. It was decided to take up the report to-morrow, in the order of business. The Treasurer's report was received, and referred to the Finance Committee.

At the afternoon session, after a number of notices of motion, it was moved by Dr. Geikie, seconded by Dr. Cranston,—That a committee, consisting of Drs. Fowler, Wright, Fenwick, Williams, and the mover and seconder of this resolution, be appointed to wait as a deputation from this Council on the Government of Ontario, to draw the attention of the Government to the pressing necessity which exists, in the interests of medical education, to have the Anatomy Act so amended, as to increase the existing facilities for the study of anatomy, as, on these being ample, depends the study of every practical branch of the profession. *Carried.* Moved by Dr. Bray, seconded by Dr. Buchan,—That two professional examinations be held, instead of one as formerly, namely, in April and October. This was referred to the Education Committee. A motion was carried congratulating Sir James Grant, K.C.M.G., M.D., on the distinguished honor conferred upon him by Her Majesty the Queen, which honor confers lustre upon the whole profession of Ontario. A suitable reply was made by Sir James Grant.

Mr. W. Webb was appointed Prosecutor for the Council for the ensuing year. Moved by Dr. Bray, seconded by Dr. Moore,—That two additional examiners be appointed. It was suggested that the students of the Western University should be recouped their travelling expenses in attending the Council examinations.

June 14th.

Moved by Dr. Ruttan, seconded by Dr. Fenwick,—That a Committee be appointed by this Council to wait upon the Minister of Finance, with a view of having the duty on surgical instruments and appliances reduced, or that they should be placed upon the free list. *Carried.* A Committee, consisting of Drs. Grant, Moore, Cranston and Logan were appointed to carry out this resolution. Moved by Dr. Henry, seconded by Dr. Orr,—That our Solicitor be instructed by this Council to prepare the Bill for an amendment to the Municipal Act on Charity, making it obligatory on Municipalities to pay for medicine and medical attendance of its poor, and that the same be brought before the Ontario Legislature at its next session, and that the Registrar be instructed to send a circular to every registered practitioner in the Province, asking their support and influence in the same.

The Education Committee made a full and interesting report on matters connected with matriculation, which was adopted without amendment. The Committee appointed to consider on what terms British registered practitioners shall be allowed to become registered and practise in Ontario, suggested that they should be treated in every respect as the Medical Council treats the medical graduates of Ontario. After much discussion, the gist of which appears in our editorial columns, the report was handed back to the special committee for re-consideration.

June 15th.

A By-law was read, passed and signed by the President, levying a tax of $1 on each and every member of the College of Physicians and Surgeons of Ontario.

After discussing several special cases from petitioners to the Council, the report of the Building Committee was presented and adopted. The same Building Committee was re-appointed. The Treasurer's report was presented, showing a balance in the Bank of Commerce of $3,004.51. The Finance Committee's report was now presented and adopted.

After the discussion of a number of letters to the Committe of Registration, and the action against a number of unlicensed practitioners, the meeting adjourned for an hour.

June 16th.

Moved by Dr. Wright, seconded by Dr. Buchan, —That the Registrar examine the credentials of candidates for examination, and make the necessary preparations for holding the examinations; and that every candidate shall file with his application a statutory declaration, that the schedule he has signed and presented is correct. After a number of presentations by the Committee on Education, which were discussed and decided upon their merits, it was decided to hold two examinations a year, and that two additional examiners be appointed. After a number of appeals being considered. The report of the Education Committee was adopted.

Selected Articles.

CORROSIVE SUBLIMATE INTERNALLY IN PUERPERAL AND OTHER SEPTICÆMIAS.

I was first led to use corrosive sublimate internally in puerperal septicæmia by observing its beneficial effects in diphtheria. The principle on which I base its use was announced in 1884, at the Medical Congress in Copenhagen, by Dr. Bouchard, who then made this statement: "Medical

antiseptic therapeutics does not propose to kill the microbe, but only to stay its pullulation. Even slight modifications in the human infected organism may prevent the indefinite multiplication of certain microbes which have invaded it."

It was found by Roice, at Utrecht, that in any suppurating focus, microbes are found in the blood and kidneys. Dr. H. J. Garrigues, in his paper on puerperal fever in the genital tract of puerperal women, has endorsed this view by recommending, in addition to local treatment, "carbolic acid, sometimes combined with compound tinct. iodine." If we can hinder the proliferation of microbes, or render them inert, is it not as important as their elimination from the system? Dr. Macan, in his report of the Rotunda Hospital for 1883, declares that he knows nothing which will quicken the elimination of the poison from the system in hetero-genetic infection. In cases in which the source of poison is hetero-genetic I am accustomed to attempt to sterilize the air in the patient's room by means of iodine vapor. I place iodine scales in cups with a little alcohol and suspend them around the room. The fumes are not disagreeable nor very irritating, and are well borne. I have used bromine, but find it rather troublesome to the throat.

My initial dose of corrosive sublimate is $\frac{1}{4\frac{1}{8}}$ grain, and if any looseness supervene I diminish it to $\frac{1}{8\frac{1}{8}}$. If there be a tendency to too frequent dejections the bichloride can be guarded by an opiate. I have never had any sore mouth nor any unfavorable symptom except a slight relaxation of the bowels, which was relieved by diminishing the dose.

In connection with the internal use of bichloride, it may be used as injection; but I believe the cases of poisoning have been due to a too large dose. Dr. Ernst has pointed out that even 1 : 10,000 will stop the proliferation of microbes. I have used in the uterus 1 : 5,000 and in the vagina 1 : 3,000. As to Dr. W. L. Richardson's pad, I have used something more simple, which I think equally efficacious. I have the nurse wring a napkin out of lukewarm 1 : 2,000 solution and apply it moist; it gives great comfort.

There are certain cases of mercurial idiosyncrasy in which it is better to use injections of liquor sodæ chlorinat. or of permanganate of potash, the latter of which I have used several times with satisfaction.

In cases in which chill or uterine colic follows intra-uterine injections, I think crayons or suppositories of iodol are excellent. Apart from its dangerously poisonous properties, iodoform masks the lochial odor, which is a great disadvantage. Iodol, although having nearly the same per cent. of iodine, appears to be innocuous, and is excellent in suppurating surfaces.

Case 1.—Mrs. R., æt. 18, primipara, was confined by me Nov. 14, 1887, of a still-born child at term. I was obliged to use forceps on account of incompetency of uterine contractions and exhaustion of patient. There was no rupture of perineum, and but a slight unilateral laceration of cervix. She rallied well from the operation. Her lochia were very scanty from the beginning. There was no trouble with the milk secretion. She seemed to get along in a normal manner, and complained of nothing until Nov. 23, or the ninth day, when she was taken with rigor and fever. The next day I found in the morning pulse 108, temperature 103° F. Severe frontal headache, nausea and fetor of the lochia. No tympanitis nor diarrhœa, and only slight tenderness over uterus and right ovary. I ordered her 18 gr. quinine and injected into the uterus a 1 : 60 sol. carbolic acid by means of Jennison's reflux tube. A few minutes after the injection she had a severe rigor, which lasted half an hour. The next day the pulse was 100, temperature 103°. I now injected 1 : 2000 hot bichloride sol., and applied tinct. iodine over hypogastrium. A few minutes after the injection she had a bad and long rigor and became much alarmed.

The following morning her temperature had gone up to 104°, and she found it impossible to turn over on account of soreness. The injections had evidently caused shock and had not relieved her in any way; in fact she was worse. I now prescribed corrosive sublimate gr. $\frac{1}{4\frac{1}{8}}$ every two hours. The next morning the temperature had fallen to 100.5° and the pulse to 92. She felt much better and less sore. I now gave her a vaginal injection of 1 : 2000 bichloride daily, and continued the same internally until the sixth day of the septicæmia, when she became convalescent.

Case 2 is that of a four-month abortion in which septicæmia ensued from retained placenta. I removed it, washed out the uterus with permanganate of potash, and gave bichloride internally with beneficial effect.

Case 3.—Puerperal peritonitis of a severe type, with bad sanitary surroundings in a gypsy crowded tenement. The bichloride caused a fall of temperature and was beneficial. Recovery. My cases uniformly show a diminution of temperature after its use, and generally very quickly.*—Dr. C. W. Stevens in *Jour. Amer. Med. Assoc.*

A NEW METHOD OF TREATING POTT'S FRACTURE.

In the condition known as Pott's fracture the displacement which occurs is twofold,—viz., outwards and backwards. The first of these de-

* I will add to the above two cases of facial erysipelas, one being puerperal, in which the use of the bichloride, gr. one twenty-fourth, stopped the spreading of the disease in 24 hours; a thing I never saw before in any other treatment. It likewise dropped the fever like an antithermic.

formities is universally recognized, but the second is often overlooked, because the ordinary method of putting up this fracture (in back and side splints) hides the displacement backwards while the apparatus is on, although it does but little to remedy it, so that when the patient begins to walk he finds that his progression is considerably impeded. An examination of the foot in such a case will show that the heel is much more prominent than it should be, that the concavity of the tendo Achillis is increased, and that the foot, if measured from the anterior margin of the lower end of the tibia to the end of the big toe, is found to be shortened.

The ordinary method of treating Pott's fracture by back and sides splints is unsatisfactory, because (*a*) considerable difficulty is found in correcting the outward displacement of the foot, necessitating constant re-arrangement of the side-splints, and (*b*) the backward displacement is not adequately affected unless so much backward pressure is made on the ankle as to incur the risk of a sore heel. To get over these difficulties Cline placed the limb on an outside splint (known as Cline's splint) and flexed the knee so as to relax the calf muscles. This method answers very well as far as the outward displacement is concerned, but has hardly any effect on the backward one.

To remedy the latter, Dr. E. W. Roughton (*Lancet*, December 10, 1887) has adopted a modification of Cline's method. The splint used is an outside splint with a foot-piece padded thickest where the foot-piece joins the other portion of the splint. Three bandages are fastened by means of safety-pins, one at the ankle passing from the instep of the splint below the ankle and turning round the heel; the second placed just above the ankle, and likewise being turned towards the heel; while the third is placed just below the knee, and turned in the opposite direction over the calf of the leg. The injured limb having the knee flexed is then laid upon the splint so that the outer edge of the foot is well supported by thick padding, and then fixed by the bandages, one being first applied above the other. The upper bandage passes backwards between the limb and the splint, then turns forward around the back of the limb and makes traction forwards, and it is then fixed by a pin, the other bandages being tightened at the same time. The middle bandage passes forward from the back of the splint between the splint and the limb, and then turns over the front of the leg and pulls backwards. The lower bandage is the most important one, and passes from before backwards between the splint and the limb, turns over the point of the heel and pulls forwards and downwards. The two lower bandages are wrapped once around the limb and splint and then fastened with safety-pins. Usually in forty-eight hours the heel bandage will require to be tightened, owing to relaxation of muscular spasm. When bruising has subsided and a sufficient amount of union taken place, this apparatus is removed and the limb put up in a silicate bandage, taking care to keep the foot well adverted and at right angles to the leg. Dr. Roughton states that he has found this method of treating Pott's fracture very simple and efficient, the foot and ankle eventually being as useful and shapely as before the accident. The great advantage of the whole bandage is that it exerts a uniform and elastic pressure in the direction required, and never produces that unfortunate result,—a sore heel.—*Therap. Gaz.*

"Homœopathic League Tracts"—Homœopathy has throughout had marks of quackery. One of the most unmistakable is its appeal from the profession to the unlearned. Discarded and discouraged in every medical society, and in all the universities of Europe, it has sunk so low as to distribute tracts calculated to impress the vulgar, in which the most ridiculous arguments are used, and the most unworthy motives are ascribed to the medical profession. We have not noticed these "Homœopathic League Tracts" in detail, and we have no intention of doing so. One is now before us, and we may take it as a sample. It is entitled "Allopathic Misconceptions of Homœopathy," and descants on the ignorance of medical men in regard to the "great" subject of homœopathy. The most honored men in the profession, and those whose names stand out conspicuously as having advanced medical science, are shown to be most hopelessly ignorant of homœopathic science, or, worse still, of that moral principle which would lead them to do it justice and to fall down and worship Hahnemann! The rank and file of the profession are represented as abettors of the immoral use of narcotics, and of any theory or mode of treatment that promises to give the doctor more to do! They adopt with uncritical haste any innovations which do not diminish their profits! The germ theory and the doctrine of the prime importance of subduing pain are adduced as illustrations of this immoral credulity of medical men. This is a pretty cool libel of the profession of Jenner and Simpson, of Parkes and Simon and Lister. Sir Joseph, who has the slight distinction of having wellnigh abolished erysipelas and gangrene—in hospitals at least,—and a few other such plagues, "is" (so the ignorant readers for whom the "Homœopathic League Tracts" are prepared are told) "now seldom spoken of." Times must be very bad with homœopathy when its advocates have to resort to such weapons as this, and to appeal to an audience that can receive such statements. The author of this tract, indeed, admits as much. He talks of the flowing tide being with the homœopaths, but says "*it seems to flow but slowly in Britain and Europe.*" So we think. And our

homœopathic friends will find that the great public of the end of the nineteenth century is not going to accept a theory of medicine which involves the detraction of those benefactors who have done so much to relieve the suffering of their fellows. It would be as reasonable to accept a theory of chemistry that left out the work of Lavoisier and Davy, or a theory of biology that discarded Darwin and Huxley. The instinct of the public—not its knowledge—keeps it from such a fatal blunder, in spite of "Tracts" and "Leagues." This seems the last card of homœopathy, and it is a veritable confession of failure. No wonder that "the tide flows slowly" in favor of homœopathy, when it has to live by traducing medicine and the leaders of medicine. But there is another reason—the exceeding attenuation of its achievements. Here is its disparity in the conflict with true medical science. After nearly a hundred years of boasting it cannot be credited with one palpable effect. It is easy to decry the germ theory and the remedies which relieve pain. But what would homœopathy give for such fruitful and palpable additions to scientific discovery, and to the abatement of human misery and disease as are represented in chloroform and its congeners, or in the antiseptic and germicidal theories of disease, or in the great results of the allopathic treatment of hyperpyrexia. The achievements of homœopathy are, like its doses, impalpable.—*The Lancet.*

NERVE TRANSPLANTATION.—Of late we have often witnessed many successful cases of nerve suture, where, even after the lapse of many years, the peripheral extremity of a severed nerve trunk has been proved to be still capable of exercising its functions, with the restoration of motor power and of sensibility to the parts that it supplied. It is, however, a new and most encouraging departure that has been successfully carried out by Dr. Gersung, of Vienna, on the illustrious physiologist, Professor von Fleischl. Sixteen years ago Professor von Fleischl sustained a post-mortem wound in the right hand, which resulted in the loss of the terminal phalanx of the thumb. The stump became painful, and amputation higher up was succeeded by the formation of painful neuromata on the divided nerve. In spite of repeated excisions, the condition continued to recur, until two months ago Dr. Gersung decided to transplant a portion of the sciatic nerve from the rabbit and to suture its trunk to the trunk of the median nerve, and its popliteal divisions to the distal ends of the branches supplying the thumb and forefinger. The portion thus transplanted and sutured under strict antiseptic precautions measured six centimetres in length. The result so far, must be most gratifying to the subject of the operation, both as a patient and a physiologist; for he is regaining sensation in the fingers, which affords sufficient evidence that the rabbit's nerve has not only become organically united with the human, but that it is performing its function normally. Moreover—and this is a very interesting feature of the case—it has not shown the tendency to "neuromatous" degeneration which marked the original nerve. The case demonstrates the well-accepted facts that the nerves themselves, or rather their axis cylinders, are remarkably prone to regeneration, and that physiologically they are simple conductors of stimuli. It suggests, further, the possibilities of more satisfactorily dealing with other morbid "habits" of nerves—such, for instance, as facial tic,—which in many cases have resisted nerve resection and nerve stretching. Why this replacement of a portion of a nerve, which has a morbid tendency, by a portion from a healthy nerve should annul this tendency, is quite unexplained. It appears to have done so in this case, and therefore it may be inferred that the method may succeed in others which have hitherto resisted all endeavors at cure by simpler means. Lastly, the case is interesting as proving the practical identity that exists between nerves of different species of animals—a fact which anatomy has long suggested, but which has only now received physiological proof.—*Lancet.*

OLEATE OF COPPER FOR RINGWORM.—At one of the asylums for orphan boys, in this city, Dr. Blanc has recently treated twenty-seven cases of ringworm of the scalp (tinea trichophytina capitis), with oleate of copper made into an ointment with vaseline, in the following proportions:

R.—Cupri oleat. . . . . ʒss.
Vaselin (vel lanolini) . . . ℥j—M.
SIG.—Apply to scalp.

The method pursued is to wash the child's head thoroughly with soft soap and warm water, after having cut the hair as close as possible. When the head is well dried the ointment is rubbed on the scalp, over and beyond the diseased spots, and allowed to remain. The scrubbing of the head is practised but once a day, but the salve is applied night and morning. In a few of the milder cases, a salve of chrysarobin (chrysophanic acid), half a drachm to the ounce, was applied, but always immediately discontinued as soon as irritation was produced. The oleate of copper application, from its soothing and antiseptic properties, was found particularly useful in those cases which had gone on to produce kerion, and was found altogether much more serviceable than chrysarobin, which latter was finally completely discarded.

The disease, which averages in duration some six months, particularly in public institutions, was cured in this instance in a somewhat shorter time, as the following statement will show:

Began treatment of twenty-seven boys with oleate of copper, May 1, 1887.

July 13. Discharged four cases—seventy-four days.

Aug. 24. Discharged four cases—one hundred and sixteen days.

Aug. 28. Discharged six cases—one hundred and twenty days.

Sept. 3. Discharged seven cases—one hundred and twenty-six days.

Sept. 22. Discharged three cases—one hundred and forty-five days.

Oct. 13. Discharged the last three cases—one hundred and sixty-six days.

Average duration of treatment, four months and four days. The last six were cases of kerion, in which there was inflammation of the subcutaneous tissues before the copper was applied; and the cure of one of them was retarded by a temporary removal from the institution. The disease had been communicated by two cats upon the premises, which were pets of the boys, and ceased to spread as soon as the cats were removed and the boys isolated. Epilation was not practised in any of the cases.—*N. O. Med. and Surg. Jour.*

Treatment of Malignant Tumors of the Breast.—In the *Glasgow Medical Journal* January, 1888, Mr. John Fagan, surgeon to the Royal Hospital and Belfast Childrens' Hospital, published a paper upon the treatment of tumors of the breast. The following is a summary of his views regarding the treatment of malignant tumors:

"1. That in many of the very worst forms of advanced painful, ulcerating scirrhus, where there is no immediate danger of death from marasmus or visceral complications, the breast may be removed with great benefit and relief to the patient.

2. That all cases of malignant growths of the breast, as soon as they are diagnosticated, should be removed at once by operation and in the thorough manner I have described.

3. That all doubtful cases should be dealt with in the same way.

4. That all recurrent growths should be removed at their earliest manifestation.

5. That all non-malignant neoplasms, as soon as they show a tendency to enlarge, and especially between the ages of twenty-five and forty years, should be removed without delay."

The following quotation from the writings of Jonathan Hutchinson bears forcibly on this point:—'Too late! too late! is the sentence written, but too legibly on three fourths of the cases of external cancer concerning which the operating surgeon is consulted. It is a most lamentable pity that it should be so; and the bitterest reflection of all is, that usually a cosiderable part of the precious time which has been wasted has been passed under professional observations and illusory treatment.'

When the doctrine of the precancerous stage shall be widely adopted, and when surgeons generally shall recognize the propriety—let me say the duty—of operation for purposes of prevention, then, and I believe not till then, shall we witness a considerable reduction in the mortality of cancer."—*Med. and Surg. Rep.*

Ergotin Injections.—In an article which recently appeared in the *Centralb. für Gynäkologie*, Dr. B. Lilienfeld, of Einbeck, speaks of his experiences with ergótin used hypodermically. Inflammatory and irritative symptoms have been frequently observed to follow the hypodermic use of ergotin. Some time ago Dr. Bumm wrote an exsive treatise on the technique of ergotin injections, and recommended weak neutral solutions of the drug.

Dr. Lilienfeld's results are still more valuable, and his conclusions are not alone based upon personal observation, but also upon the experiences of his colleagues.

He holds—1. That the injection should not be made in the abdominal wall, but directly into the muscles of the back or hips. 2. That the solution should be made at the bedside, immediately before using the injection, still better if the solution be made in the syringe. The author lays great weight upon this point, as he contends that freshly-made solutions are absorbed with far greater rapidity than others. 3. The best preparation of ergotin seems to be that of Bombelon, and the strength of the solution 2 to 8 parts of water. Other preparations, however, have also been used with equally good results. 4. Sharpness and perfect cleanliness of the needle are indispensable and of great importance. 5. The injection should not be made in the skin, but the needle inserted until it may be moved freely under the cutis, and the solution then injected.

In conclusion, the author cites numerous cases which go to prove the value of the above suggestions. In one case, of a woman suffering from myoma of the uterus, one hundred and forty injections were made in four months without occasioning any irritative or inflammatory symptoms. —*Therap. Gaz.*

Acute Peritonitis Successfully Treated with Saline Purgatives.—A man, aged twenty-one, was admitted into the workhouse infirmary on Jan. 6th, suffering from acute peritonitis. Three days before admission he was attacked with vomiting and pain in the abdomen; there was constipation. The abdomen was tense and tympanitic, and the abdominal respiratory movements were abolished. There was extreme tenderness above the abdomen, the legs were drawn up, the pulse small and frequent, the expression anxious. He had retention of urine, and fever. No tumor

could be detected in the right iliac fossa; vomiting was incessant, and pain about the umbilicus greatly complained of. Dr. Suckling thought that the peritonitis was set up by typhlitis, due to fæcal retention. Opium and belladonna were first given, but the vomiting and pain continued. Then half-drachm doses of sulphate of magnesium and sulphate of sodium, with ten minims of tincture of belladonna, were given every four hours. Improvement soon followed this treatment, several liquid motions being passed. On Jan. 9th, the vomiting, pain, and tympanites had passed of, and a distinct fullness could be observed with increased resistance to pressure in the right iliac fossa. The medicine was continued, with the result that the motions became more and more solid till the 14th. He continued to complain of dragging pain in the abdomen for some time; but in about three weeks he was able to get up, and five weeks after his admission was allowed solid food. He has since had two or three slight relapses, which at once yielded to purgatives and proper dieting; and at the present time there is a distinct indurated swelling in the right iliac fossa. Dr. Suckling was of opinion that in this form of peritonitis, and in typhlitis due to fæcal retention, saline purgatives in moderate doses, and with plenty of water were of great value.—*Medical Analectic.*

THE TREATMENT OF ULCERS.—An article appeared in the *London Medical Record*, for December 15, 1887, giving interesting details of the treatment of ulcers by phosphoric acid, as shown by the experience of Dr. Grossich. By his method of treatment, he used a ten per cent. solution of pure phosphoric acid in distilled water. The ulcer is covered with a bit of lint dipped in this solution, and the dressing renewed three or four times a day. The patient for the first few minutes feels a slight burning sensation, but this soon passes, and within twenty-four or thirty-six hours the ulcer cleans, and looks better. Inflammation or eczema of the surrounding parts disappears, and all pruritus ceases. The ulcer cicatrizes rapidly, and the cicatrix is firm and healthy.

Kollischer treated tubercular affections of the joints with injections of the phosphate of lime, with great success. Dr. Grossich has also had good results with this treatment, and cites some very interesting successful cases.

The treatment by the solution of phosphoric acid was further employed in a case of tuberculous abscess of eight months' duration, and also a case of eczema marginatum which had lasted more than a year, and good results followed.

The above suggests the superiority of Horsford's Acid Phosphate as a substitute for the phosphoric acid.

The effective acidity of this preparation is about the same as the ten per cent. solution of phosphoric acid which is prescribed in the above treatment, and it may therefore be justifiably employed by the profession in the treatment of disorders of this character. It has the advantage of containing the phosphates in solution, notably the phosphate of lime. It follows, then, that all cases that require the phosphoric acid treatment can be more advantageously treated by Horsford's Acid Phosphate, and the suggestion is hereby commended to the profession.

DIET IN ALBUMINURIA.—The condition known as "large white kidney," a malady of tolerably common occurrence, is due in a large number of cases to the chronic irritation set up in the eliminatory organs by the excretion of incompletely oxidized nitrogenous matter resulting either from excess of nitrogenous material ingested or from hepatic or other visceral disease. In either case it is important to bear in mind that the object to have in view is to reduce, or at any rate not to augment, the quantity of these partially oxidized products. For this reason albuminuric patients should avoid foods containing an abundance of these extractives. Beef tea, beef extracts, and the like, are little less than poison to them, as they invariably accentuate the irritation and aggravate its results. It has been found that the systematic subcutaneous injection of these substances in guinea-pigs gave rise to the characteristic renal lesions with the usual train of symptoms, the severity of which was in direct proportion with the quantities injected.—*Med. Press and Circular.*

GALEZOWSKI'S ANTINEURALGIC FORMULA.—The Paris correspondent of the *Pharmaceutical Record*, gives the following formula:

Menthol	gr. xij
Cocaine	gr. iv
Chloral	gr. ij
Vaseline	gr. lxxv

M. Ft. Unguentum. Sig. — Apply to the painful parts, and cover with muslin.

It is said to be especially useful in periorbital pains and in ophthalmic hemicrania.—*Med. and Surg. Rep.*

STOPPAGE OF THE NATURAL FLOW OF URINE, says Ultzmann, may be caused by:—1. Occlusion of the smaller urinary tubes, as in cholera and any of the renal diseases. 2. By occlusion, twists, and turns in the urethra. Ultzmann records the case of a man, æt. 43 years, with calculus of the kidney, who suddenly developed anuria, which caused death in two weeks. The autopsy showed a cyst of the left kidney as large as a goose-egg, with obliteration of the ureter, and on the right side an enlarged kidney, with three small stones filling the ureter. 3. By a tumor of the bladder. —*Internat. klin. Rundsch.*

THE ETIOLOGY OF TYPHOID FEVER.—In concluding a paper in the *Journal of the American Medical Association*, Dr. I. N. Davis, says: "The conclusion which follows, therefore, is that the real nature of the materies morbi of typhoid fever is but little known; that if it is not autogenetic, its origin many times is involved in impenetrable obscurity; that the organism or chemical product is as likely to assume an active form in the healthy surroundings of an isolated farm house as amid the filth of a badly neglected village or city; that constitutional proclivity, feeble health, or bodily fatigue has much to do in determining an attack. It is more than probable, also, that the poison may remain latent in the system until evoked by physical exhaustion, despondency, or other conditions of vital depression. Twenty-four to twenty-eight days constitute sufficient time for the poison to escape from the body of the sick, ripen if imperfect, and produce a toxic effect on the system of a previously healthy person. The poison which perpetuates the disease is not contained in the stools alone, but may emanate directly or indirectly from the body of one sick with typhoid fever. Water is certainly not the medium which conveys the poison, even in a small majority of cases, in the country."—*Med. Reg.*

DR. SUDDUTH, of Philadelphia, says:—Fournier's statistics, as to the class of women from whom gonorrhœa is most frequently derived, are interesting. Out of 387 cases in which males had contracted gonorrhœa, there were from

Public prostitutes,	12
Clandestine prostitutes,	44
Kept women,	138
Shop girls,	126
Domestics,	41
Married women,	26

Thus, it will be seen, that out of the whole number, with the exception of 38, the remainder were those generally considered as coming under the "soft snap" head.—*Md. Med. Journal.*

THE TREATMENT ON DYSMENORRHŒA.—Goubert prescribes for young girls:

Iodoform	gr. ½.
Ext. belladonn.	gr. ⅙.
Asafœtidæ	gr. 1⅓.

In pill form.

Beginning six or eight days before the time of menstruation, six pills should be taken daily.

For adult women he prescribes:

Potass. iodid.	ʒ i.
Tinct. croci.	ʒ ii.
Tinct. belladonn.	ʒ iii.
Syrup. aurant. cnrt.	ad ʒ iv.

Dose a tablespoonful morning and evening, in any convenient liquid, for a week proceeding menstruation.—*Gaz. de Gynécol.*

MR. ST. CLAIR BUXTON finds the following formula uniformly successful in curing tobacco amblyopia:

Liq. hydrarg. perchloridi (B. P.)	ʒss.
Potassii iodidi.	gr. xij.
Aquæ destil.	ʒj.

To the above he adds for simultaneous administration the following pill:

Ext. nucis vomic.	gr. ss.
Ext. hyoscyami.	gr. j.

Ft. pil. no. i. The pill of this strength is given three times a day, and with the solution.—*Lancet.*

A REPORT comes from a New England town of the death of a young woman who had just given birth to a child, under the obstetric service of a "Christian scientist," whose only remedy for the post partum hæmorrhage which ensued, was prayer. In the excitement the child failed to receive the necessary attention, and it also died. This latest species of quackery, as sacrilegious as it is impotent, is securing quite a following throughout the country. Several of its exponents have opened out in this city. Fortunately the coroner has not as yet been called to sit in judgment as to the cause of death of any of their patients. This argues well for the intelligence of our citizens. But it will not be long before some such case as the one above alluded to occurs. There will then be the usual locking of the stable door after the horse has been stolen. The Lord will, in answer to prayer, help those who help themselves, and it is criminal to teach the possibility of getting something for nothing (or for the mere asking) even in matters of health.—*Med. Age.*

A CAUTION AGAINST THE COMMON USE OF POTASSIUM CHLORATE.—The *Medical Press* writes that chlorate of potassium is a very popular remedy; so much so, indeed, that the idea of its being poisonous in certain doses never occurs to anyone. Yet it is evident that if five-grain pellets be thoughtlessly sucked at intervals throughout the day, a very considerable and certainly injurious quantity will ultimately have been absorbed. In children it gives rise to cerebral symptoms, especially "night terrors," with more or less intense prostration. It would be well if the public were cautioned now and again, that they cannot with impunity assimilate indefinite quantities of a salt which in anything like large doses is an unequivocal poison.—*Med. News.*

OINTMENT OF NITRATE OF MERCURY IN THE TREATMENT OF BOILS AND WHITLOW.—Dr. R. C. Kenner has used this ointment for six years as an abortificiant for boils and whitlow, with excellent results. He covers the whole finger (in the case of whitlow) or the boil and the surrounding skin

with a layer of the ointment one-eighth of an inch thick, and then applies adhesive plaster. The application is not painful, it causes a slight and not unpleasant "drawing" sensation, followed by disappearance of all pain in twelve hours. In twelve hours more the inflammation has usually gone, and the inflammatory products are in great part absorbed. This method of treatment is of course applicable only in the early state of these affections, before the formation of pus.—*Med. and Surg. Rep.*

VOMITING OF PREGNANCY.—Dr. E. S. McKee in the *Memphis Med Mo.*—Crede recommends the giving every five minutes of teaspoonful-doses of nourishment, preferably iced milk, the patient taking it through a glass tube and lying absolutely quiet. Chazan has reported an interesting case of this complaint in which no abnormality could be discovered about the patient. She was inconsolable at the idea of being pregnant. She was put under ether and made to believe that the fœtus had been removed; the vomiting ceased from that time. This case has led Chazan to believe that perhaps in most cases hyperemesis gravidorum was due to some nervous affection of the mind, and not, as some authors believe, to an abnormality of the genital organs.—*Arch. of Gyn.*

EFFECTS OF MODERATE DRINKING ON THE HEART AND CIRCULATION.—Dr. George Harley sums up the effects upon the heart and circulation which he believes follow the moderate use of alcohol, in the following propositions: 1. Alcohol, when indulged in, even well within the limits of intemperance, has a most prejudicial effect on heart disease. 2. Sudden spurts of muscular exertion act most deleteriously on all forms of organic cardiac affection. 3. Mental excitement is a cause of rupture of atheromatous blood-vessels. 4. A mere extra distension of a stomach by wind may suffice to fatally arrest a diseased heart's action. The knowledge of these facts, he says, has for some years past led him to make it an invariable rule to impress upon all patients laboring under diseases of the circulatory system, who desire to minimize the effects of their complaints and ward off as long as possible the inevitable fatal termination, to pay strict attention to what he calls the following three golden rules: (1) Take exercise, without fatigue; (2) Nutrition, without stimulation; and (3) Amusement, without excitement.—*Lancet.*

REMEDY FOR MYALGIA.—An old and well-known formula combined with lanoline had such a quick and favorable effect in myalgia of the scapular and brachial regions, that I feel safe in offering it to the profession. R.—Hydrate chloral, gum camphor, āā ʒ ss. Mix well, until liquid, and add lanoline, ʒ j. M. S.—Rub well over painful parts. To show what lanoline can do, it fully relieved the pain in six hours, and had the constitutional effects of chloral as fully as if the person had taken gr. xx–xxx per mouth. Only two applications were used, and only a limited portion of the salve.—*Med. Rec.*

NEURITIS.—A case of neuritis involving the sciatic and crural nerves of one side, accompanied by loss of power and wasting of muscles, was recently presented at the Jefferson clinic, and the following plan of treatment advised: R. Syr. calcii lactophosphatis, f ʒ j; liq. potassii arsenitis, gtt iij. M. Sig.—Ter die. Also of ol. morrhuæ, ʒ j ter die.

Locally, to lessen congestion, a constant, descending, stabile galvanic current as strong as could be borne was advised to be used to the affected nerves; faradism, if need be, to exercise the muscles; and for the pain, if it became at any time necessary, the hypodermatic injection of cocaine in the vicinity of nerve.—*Coll. and Clin. Rec.*

TREATMENT OF INTRACTABLE ROSACEOUS NOSE.—A country practitioner, who has long suffered from rosaceous nose, writes to the *British Medical Journal* to recommend scarification, at first twice a week, then once, and latterly once a fortnight. It has a marvelous effect, the heat, pain and unnatural shape at once subsiding, and the redness rapidly abating until, at the end of three months, a month since last scarification, the nose is happily restored to its natural shape and color. It is not a painful process.—*South'n. Cal. Pract.*

APPLICATION FOR GOUT AND RHEUMATISM.—A mixture made up of either, 15 parts; flexible collodion, 15 parts; salicylic acid, 4 parts; morphine, 1 part; painted every hour on joints affected with gout or chronic rheumatism, is said to afford great relief from pain.—*Med. and Surg. Rep.*

A DEODORIZING INJECTION FOR UTERINE CANCER.—Duchesne (*Nouveaux Remèdes*) credits Chéron with this formula: White vinegar, 300 parts; tincture of eucalyptus, 45 parts; salicylic acid, 1 part; salicylate of sodium, 20 parts. From one to five tablespoonfuls, added to a quart of tepid water to be used daily for vaginal injections.—*N. Y. Med. Jour.*

"OH, Professor," exclaimed sentimental old Mrs. Fishwacker, during a private organ recital in her new music-room, "do you pull out that sweet nux vomica stop once more!"

HE FORGOT SOMETHING.—Doctor: "I will leave you this medicine to take after each meal."

Mike: "And will yez be koind enough to lave the meal, too, dochtor?"—*Tid-Bits.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

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TORONTO, JULY, 1888.

The LANCET *has the largest circulation of any Medical Journal in Canada.*

THE ONTARIO MEDICAL ASSOCIATION.

The eighth annual meeting of the above Association was held in Toronto, on the 13th and 14th ult., Dr. Rosebrugh, of Hamilton, President, in the chair. The attendance was up to the average, and was representative, the East sending a fair complement to swell the ranks of this now flourishing and influential society. The meeting must result in good, not only to those who attended and took an active part in the business transacted, but also to the profession at large, and, let us hope, to the cause of medical education, ethics and science. The American brethren were warmly welcomed, and they showed by their presence and the active part they took in the discussions which arose, the interest they feel in our advance in the noble science. This community of interests between the profession in the United States and Canada, as it should be, and we hope, as the years go by, we shall have more and more reciprocity in all that pertains to medicine, both material and intellectual, with our great and kindly neighbors to the south, and more frequent and full interchange of thought, and of the amenities of professional brotherhood. But why is it, may be reasonably asked, if gentlemen from the United States find it either pleasant or profitable, or both, to attend these meetings, do not our natives show more interest in them, by their presence in greatly augmented numbers? The Association is as we have said large; flourishing and influential, but we venture to say, it is not either so large, flourishing or influential as it should be, considering the standing and numbers of the medical profession in Ontario.

One point in the management of the meetings, we think requires more care on the part of the chairman, and that is the allowing of sufficient time for discussions, on papers read, and the encouragement rather than the discouragement of such discussions. It were surely better that some papers should be considered read, than that discussion should be scanty. Also, we think, more attention should be given to the examination of patients shown to the Association, and to that end more time allowed for such examination. It is rather a damper on any gentleman, who has taken the trouble to arrange for the exhibition of an interesting case, to have two or three who happen to sit next the platform make a cursory and evidently very superficial examination of the case, which has cost him so much trouble, pains and thought, and then to have "next" called on him with about the same interest and appreciation of what has gone before, as is evinced in those places of business where "next" is the standing order of the day and night. This has been, we think, a mistake, committed to a greater or less extent for the past three or four sessions of the Association, and one which, if we wish to encourage the practical use of these meetings, were well remedied.

Some advance was made in the direction of the improvement of our Code of Ethics, and the discussion on the question of advertising or no advertising by specialists or others in the profession, was pretty well and warmly ventilated, but without any definite conclusion being reached. It is to be hoped that the committee which has charge of this matter may push it vigorously next year, so that we may know definitely how we stand on this, as on not a few other points brought up in this connection, and which may be seen by referring to the report on another page of this issue.

The question of the tax on surgical instruments and appliances did not come up. This is to be regretted. If this body had taken active measures, in conjunction with the Ontario Medical Council, we might have hoped for some measure of relief.

The East has the President for next year, and we think a very wise choice has been made. Dr.

Henderson has been an active and interested member of the Association for a long period of time, and we expect that the next year's meeting, under his rule, will be in every respect excellent. We congratulate Dr. Hendersen on the honor which has been conferred upon him, and the Society on their choice of a young, energetic and popular president.

THE ONTARIO MEDICAL COUNCIL.

The last meeting of the Council was not characterized by the transaction of business of unusual interest. The profession may well congratulate itself on the magnificent new building which is approaching completion, and in which for the first time the Council met.

It was a wise thing to appoint a committee to wait on the Government, to point out the defects in the "Anatomy Act," and the consequent scarcity of anatomical material. Were the Act as it is, fully carried out, matters would be much better; but every possible method of shirking its provisions is experienced in many, indeed, in most of our public charities, and good medical education, on which the public everywhere depend and which is so essential, is on this account crippled more or less. Were the members of our profession in the Legislature and out of it, to do their duty in informing the public mind fully in regard to this matter, they would aid the Council and the medical colleges of Ontario very largely. Even in Quebec, all the public institutions are made, under the Anatomy Act of 1883, tributary to medical education; while in Ontario, and chiefly through the persistently urged, but mistaken views of several of the medical superintendents, the Lunatic Asylums of Ontario do nothing in this direction. With the Medical Council and the Ontario Medical Association both moving simultaneously and earnestly in this very important matter, we hope very soon to learn that our colleges have no longer grounds of complaint on this score.

The usual business of appointing officers, framing reports by various committees and considering these, constituted, as is always the case, the staple of the work done; and this work is most valuable, especially that of the Education Committee, which spares neither time nor labor in considering all matters relating to professional educatiou.

The subject of the status to be given in Ontario to British registered practitioners was discussed a good deal, but no definite conclusion reached. It was thought best to postpone it for a year, in order to collect all possible information in regard to a matter so important.

It was decided to hold an examination in the fall. This is only reasonable, for a whole year is too long to keep candidates waiting, whose means in many cases are of the scantiest. Let us hope that a second examination each year may be the rule hereafter, as it will be, if the cost of holding it can only be kept within reasonable limits, and there is no reason why this may not be done. The Council most wisely neither made many changes nor encouraged the spirit of change, in the curriculum. There has been in the past altogether too much of this tendency to change year by year, and now that we have in matriculation and in professional examinations reached so high a standard and one of which our Province may well be proud the wisdom is to do as the Council has done—let well alone—and give no countenance to needlessly unsettling what is admittedly excellent, and give the profession time to see and approve of the leading position Ontario proudly holds in medical education.

QUACKERY CRIMINAL.

Little concerning the odiousness of quackery need be said. But recently a novel view as to its criminality was held by a learned Judge in Manchester, England, and one which will commend itself to all intelligent men. It is a surprise to us that it has not been acted on until the present, especially when we consider that medical quackery has obtained in all ages, and among all nations. The Judge decided in the Manchester case, that obtaining money under false pretences in this, as in all other methods, was a criminal offence, which renders the offender liable to imprisonment. It is evident that all quacks do violate this very necessary law at all times, as well as those in Manchester, and that the whole fraternity are equally subject to its penalties, not only in England but in all civilized countries. It is not shown that those five prosecuted were sinners above all others. They simply opened a consulting room, advertised their ability to cure all diseases. They did no

claim to be qualified in any legal way, nor does it appear in the evidence that they assumed the title of physicians. They were not tried under the Medical Act, but simply for obtaining money under false pretences. It was established by the prosecution that they were not qualified by education nor special training to do what they professed to do, and that they were consequently unable to give those applying to them value for their money, and they were convicted. It passes our comprehension that this very simple and natural proceeding, under a law so long established as to become constitutional in most countries, has not been taken advantage of in the past, by those whose duty it was to enforce the laws in the interest of the public welfare. That these ghouls should be permitted to fatten on a suffering class of the community, who are naturally unable to know their incompetency to perform what they promise, or detect their atrocious mendacity until it is too late, is not creditable to paternal government in any country. In most, if not all other matters of incomparably minor importance, men are not permitted to prey on the public, and must render some kind of fair equivalent for the money obtained from them; but in the matter of health and life, it has hitherto been held, that so long as they did not assume the title of M.D., they were in no way amenable to the laws of the land, and might pursue their nefarious imposition on the credulous suffering citizens with impunity. Some efforts have been put forth in this country in the past, to suppress quackery, but they have not been successful in wholly removing the evil from among us. But we trust that, with this decision in Manchester as a precedent, our officials may be in a position to inaugurate a new order of things, and entirely prevent the extortion of money from the sick and suffering, by this class, who have hitherto preyed on the community, in spite of the laws specially enacted for the purpose of protecting those who are incompetent to protect themselves. Medical men should not be obliged to bear the odium of enforcing this view of the law, but where those whose duty it is, are supine, and neglect their duties for the protection of the public in this matter, it might be wise for our Medical Council to attempt to enforce it, in a few instances at least, for the purpose of procuring a decision in Canada on so important a matter.

TAX ON SURGICAL APPLIANCES.

We take the following from the *Southern Practitioner*. If our brethren on the other side of the line have just cause of complaint, as they undoubtedly have by this showing, how much worse off are we in Canada. We cannot hope to manufacture for ourselves, as is done in the United States, and so are entirely at the mercy of foreign producers. This is a question which should be agitated by the profession as a whole, and we believe that if energetic action were taken in the matter we should be able to gain relief: "1. Physicians are at the mercy of instrument-makers in regard to price, make and quality of finish because of the lack of competition. 2. The price of instruments made in this country is out of proportion to that paid for similar instruments on the continent of Europe. 3. Surgical instruments and appliances are so costly that but few doctors entering the profession can provide themselves with an outfit adequate to carry on a general practice. At present prices it is impossible for a country physician's income to sustain his investing in costly instruments, and as a result many simple cases, such as retention of the urine, foreign bodies in nose or throat, deep-seated abscesses, etc., all of which could be relieved at once with proper instruments, must either die from the immediate cause or from the effects of time lost in seeking skilful manipulation, or else they are frequently crippled and disfigured because the most intelligent help, though patiently given, is itself crippled for want of proper instruments. 4. The cheaper grades of instruments are either antiquated or so poorly made that they may prove a cause of failure in operations, sapping, as it were, the natural inclinations to surgery in its inception. 5. European instruments are from 25 to 75 per cent. cheaper than ours, and their introduction into the market will enable the mass of doctors to buy those of prime necessity, will bring down the price of the home-made appliances, and oblige the makers to use good material and put a better finish to their work. 6. The removal of import duties on surgical and other instruments used by the profession, and on medicines in general, will produce the same results, as we all know it did on the article of quinine.

MR. THOMAS BRYANT has retired from the post of Surgeon to Guy's, after thirty-one years' service.

VIBURNUM PRUNIFOLIUM IN THREATENED ABORTION.—Dr. D. A. Richardson, in an article in the *Med. Reg.*, speaks highly of the success attending the administration of viburnum prunifolium in threatened abortion. He gives a case in which, with well-marked uterine contractions, the os was beginning to dilate. He says : I then gave the following :

R.—Chloral hydrate, ... gr. x.
Fld. ext. viburnum, ... gtt. x.
Water to, ... ℥ j.

Take every half-hour till easy, and continue at intervals of four hours after cessation of pains.

I left the patient quiet after two doses, and on my return next day gave the following :

R.—Ammon. bromid., ... ℥ ss.
Ext. viburni prun., . . . f ℥ vj.
Aquæ ad., ... ℥ iv.—M.
Sig. ℥ j. t. i. d.

This was continued for a week. In May, about four weeks from the first visit, I was called again, and found the same conditions prevailing, with the most severe pains I have ever seen in a case which escaped abortion. I gave the chloral and black-haw as before, and repeated the prescription for ammon. brom. and black-haw, ordering its continuance twice daily until the patient was delivered.

She was delivered at full term, without forceps, of a healthy female child, weighing eight pounds, which is still living and in good health. In Nov. 1887, being again in her seventh month, she began complaining of bearing-down pains, and I gave her the prescription for ammon. brom. and viburnum, with the effect of quieting them entirely ; and on Jan. 10, 1888, she was delivered of a male child, eight and one-half pounds in weight. I have used the some mixture in several cases where bearing-down pains are experienced, either during the period of gestation, or at the menstrual period, and know of no better remedy in either condition.

HOT WATER IN SURGERY.—The use of hot water in surgery is said by many surgeons to be based upon a few principles that make it necessary for the water to be real hot. The following suggestions cover the ground :

After the larger vessels have been tied in an operation wound, there occurs an outward flow from the divided arterioles, venules, and lymph-spaces of a sero-sanguineous fluid, highly albuminous in its character, in varying quantity, and continuing for a longer or shorter period. As long as this outward flow continues there is perfect immunity from infection by atmospheric germs. The application of hot water checks this outward flow, coagulates the albuminous elements in the fluid, and forms an impenetrable shield over the surface of the wound. Hot water applied to the abraded surface acts as a powerful cardiac stimulant and controls shock.

THE PHYSICIAN'S FEE.—The *Medical Record* gives the following excellent rules for guidance in the collection of fees :

Always make a charge for each service ; this gives it a business value in the eyes of the patient. The charge should always be just and reasonable ; then no deduction is necessary. Insist always on full payment, based, if necessary, upon itemized accounts. When the patient asks for a reduction of his bill, recall the sacrifice of sleep, of meals, and of comfort in rendering him prompt service. Think of your preferences then and of his now. Never allow sentiment to interfere with business ; the "thank you" is best emphasized by the silvery accent of clinking coin. The loss of money by sickness only affects one side in every other business ; why should it be different when the doctor is to be paid? Always charge a fixed fee, and never trust to your patient's generosity or embarrass him by guessing an amount that would be satisfactory to you ; it is very much like firing with a kicking gun at a black cat in the dark. Render bills at short intervals, and be in earnest when you commence to collect them.

DIABETES MELLITUS AND ITS TREATMENT.—In an article in the *Br. Med. Jour.*, Dr. Hofmeister, of Carlsbad, says of this disease :—"In conclusion, I venture to lay down the following propositions, as summing up the results of my studies and observations :

"1. We are still in total ignorance as to the etiology of diabetes mellitus.

"2. The quantity of sugar found in the urine is of no significance at all in judging of the severity and danger of any particular case of diabetes.

"3. The smallest traces of sugar, found only by most careful chemical examination of the urine, are of considerable importance in a great many cases, so that they cannot be left out of account in trying to arrive at a correct diagnosis and prognosis.

"4. The dietetic treatment must be adapted to

the special requirements of each case, as there are cases in which, without regard to the amount of sugar secreted, complete abstention from starchy matters is not only useless, but directly injurious.

"5. According to the present knowledge, strict anti-diabetic diet, combined with the use of the mineral waters of Carlsbad, is the best method of treating diabetes mellitus."

CANADIAN MEDICAL ASSOCIATION.—The twenty-first annual meeting will be held in the City of Ottawa, on the 12th, 13th and 14th of September next. The following are the officers of the Association: President, J. E. Graham, M D., Toronto; President elect, George Ross, M.D., Montreal; General Secretary, James Bell, M.D., Montreal; Treasurer, Charles Sheard, M.D., Toronto. Vice-Presidents: for Ontario, Dr. Eccles, London; Quebec, Dr. Christie, Lachute; New Brunswick, Dr. Currie, Fredericton; Nova Scotia, Dr. Wichwire, Halifax; Manitoba, Dr. Blanchard, Winnipeg; British Columbia, Dr. True, New Westminster. Local Secretaries: for Ontario, Dr. Jas. A. Grant, jr., Ottawa; Quebec, Dr. Armstrong, Montreal; New Brunswick, Dr. Trueman, Campbellton; Nova Scotia, Dr. Freeman, Sackville; Manitoba, Dr. Chown, Winnipeg; British Columbia, Dr. Milne, Victoria.

PARALDEHYDE AS A HYPNOTIC.—Dr. Allen A. Rawson, writing to the *Med. & Surg. Reporter*, says it is valuable "in nervous irritability, or even cerebral exhaustion and insomnia, especially the latter." He gives the following formula, as the best he has been able to devise:

R—Paraldehyde, ...	℥ ij.
Glycerine, ...	℥ iv.
Simple syrup, ...	℥ j.
Sweet spirits of nitre, . . .	℥ x.

Oil of sweet orange (or oil of anise) twenty drops to flavor. Mix and unite by agitation. Dose.—One to four fluid drachms every hour, or two to four hours.

This may be administered alone, or with water. He advises a few drops of tinct. cocci, to give color to the mixture.

NEW REMEDY FOR SEA SICKNESS.—The theory has been lately advanced by Dr. Leiser (*Br. Med. Jour.*) that sea sickness is caused by arhythmic respiration brought about by the ship's motion. This irregular respiration produces insufficient aeration of the blood to a degree great enough to act as a poison to the brain for the time being. The remedy is simple, to take full and rhythmical respirations, not fewer than twenty to the minute, breathing by count as it were. He had his theory and remedy well tested by Drs. Stockman and Prentice on a recent trip across the Atlantic in the S. S. "Etruria."

SCOTCH OATS ESSENCE.—Dr. R. G. Eccles has shown in the April issue of the *Druggists' Circular* (says the St. Louis *Cour. of Med.*), that the article which has been widely advertised as a nerve tonic and invigorator contains one-third to one-half of morphine in each fluid ounce. Just the persons who are predisposed to morphinomania are those who would be most likely to be attracted by an article claiming what was claimed for this, and, without knowing it, would be likely to acquire that terrible appetite which, for persons of that temperament, is generally utterly irresistible. Stringent legislation should be enacted to prevent such diabolical fraud.

PUERPERAL ECLAMPSIA.—Dr. Wm. Goodell says (*Med. Standard*), in the majority of cases of puerperal eclampsia, I limit my treatment to chloral hydrate thrown up the bowel. This is repeated whenever twitchings or other premonitory symptoms of recurring convulsions manifest themselves. In plethoric cases I bleed first and then give chloral hydrate per rectum. Whenever convulsions are threatened, I either bleed or else give chloral hydrate per os, in smaller doses, until headache is relieved, or until the twitching, double vision or blindness are removed. If labor has begun, I give chloroform, not ether, and deliver rapidly If labor has not begun, I watch and await events, interfering only when compelled.

OZŒNA TREATED BY INHALATION.—Noquet gives the following (*Rev. de Thérapeutique*):

R—Chloral hydrat., ...	grs. ¾.
Acid. boric., ...	grs. 90.
Glycerin. pur., ...	℥ 2½.
Aq. lauro-cerasi, ...	℥ 5.
Aq. destill., ...	℥ 50.

The spray should be thrown into the posterior nares, and the patient should expire it through the nostrils.

FOR INSECT STINGS.—The following is recommended by Dr. Bernbeck (*Therap. Gaz.*) for insect stings or bites:

Collod. elast.,	ʒv.
Acid. salicyl.,	gr. 15½
Collod. elast	ʒiiiss.
Hydrarg. chlorid. corrosiv.,	⅛ gr.

SIG.—To be applied to the sting.

When the above is applied very soon after the infliction of the sting or bite, pain and irritation at once cease, and swelling of the surrounding skin rarely takes place.

TONSILLITIS.—Dr. Hillary (*Practitioner*) gives the following as his method of treatment in this troublesome disease:—Open the bowels freely with a good dose of mistura sennæ co., put the patient on milk diet, and administer the following draught:

℞—Sodii salicylatis,	grs. x–xv.
Tincturæ aurantii corticis,	♏ x.
Aquæ,	ad. ʒ j.—M.

Sig.—To be taken every four hours.

When the inflammation in the throat begins to subside, reduce the dose of salicylate and continue to give it in smaller doses for a few days after all throat symptoms have disappered.

EPILEPSY.—The following is a favorite prescription, especially in epileptics with weak or irregular heart action:

℞—Zinci valerianatis,	ʒ j.
Ext. belladonnæ,	grs. vj.
Pulv. digitalis,	grs. vj.

M. ft. pil., or caps. xx. Sig.—One three times a day.

COCAINE IN WHOOPING-COUGH.—This drug has been used with excellent results in cases of whooping-cough *(Al. Med. Central. Zeit.)*, where the usual remedies had failed:

℞—Cocaine mur.,	grs. iij.
Aq. amygdal. amar.,	ʒ iiss.—M.

Sig.—Gtt. x–xv, several times daily.

The relief was remarkably evident, and in about two weeks the disease had disappeared in four cases in which this treatment was adopted.

HOSPITAL APPOINTMENTS.—The following gentlemen have recently been appointed to the Toronto General Hospital:—Drs. A. McPhedran and W. B. Nevitt to the regular staff, and Drs. Spencer, J. W. F. Ross, T. Covernton and A. Baines to the extern department.

FLATULENT DYSPEPSIA.—The following is recommended (*Jour. de Méd.*) as very useful:

℞. Bismuth. subnitrat.,	
Magnesiæ.,	āā gr. xxx.
Belladonnæ pulv.,	
Zingiberis pulv.,	āā gr. iij. M.

Divid. in chart. x.

SIG.—One twice daily in peppermint water.

CHOLERA INFANTUM.—Dr. W. H. L. Hale says (*Polyclinic*), the formula he prefers in cholera infantum and many other diarrhœal disorders in children, is the following:

℞—Bismuthi salicyl.,	ʒ ij.
Tr. Capsici,	gtt. xij.
Spts. ammon. aromat.,	f ʒ iss.
Pulv. acaciæ,	ʒ ij.
Aq. cinnamomi, q. s. ad.	f ℥ ij.—M.

Sig.—Teaspoonful every two hours, for a child from three months to one year of age.

HERPES ZOSTER.—Dr. Guibot says he (*Med. Rec.*) recommends flexible collodion as an application in the treatment of herpes zoster. The advantages are that it has a local anæsthetic action, that it exerts a uniform pressure on the lesions, and that it forms nn impermeable covering which protects them from the action of the air.

HE MISSED THE MARK.—Young physician (to patient): "What you need is exercise, sir. You should walk more." Patient (reaching for his pocketbook): "How much, young man? I walked all last night with the baby."

BRITISH MEDICAL ASSOCIATION.—The fifty-fifth meeting of this august body will be held at Glasgow, August 7th, 8th, 9th and 10th, 1888.

THE practitioners of the United States are moving for reciprocity in medicine with Great Britain. Dr. Meany, of Chicago, who is now in London, says the *Med. Rec.*, has written to an official representative of the United States as follows:—"We beg, sir, most respectfully to ask your aid and consideration for the purpose of having granted, to legally qualified practitioners of medicine in the United States, the same privileges for those who may desire to practise medicine

n the United Kingdom." Registered practitioners n the United Kingdom are allowed to practise in he United States on equal footing with graduates f American schools and colleges.

Wm. R. Warner & Co. have issued the follow-ng notice to physicians :—"We take this method f denouncing the circulation of certain erroneous eports as being the outcome of ignorance or nalice. We have no connection with the firm of H. H. Warner & Co., of Rochester, who make "Safe Remedies" and other patent medicines. Our advertising is to the medical profession and our pills and products (Warner & Co.'s) have been used and held in high esteem by the most eminent doctors, during the past thirty years, in the United States and in foreign countries. The therapeutic value of a remedy is ascertained by the medical practitioner, and it is the province of the manufacturing chemist to prepare the various medicinal preparations in the most correct, compatible, palatable, and convenient manner by the aid of skill acquired by years of practice and experience.

Dr. D. C. Allan, of Amherst, U. S., writes concerning Papoma.—Various kinds of food for invalids, and particularly for children, have received my closest attention for several years, and most all kinds have more or less merit; but since the first introduction of "Papoma," the manufacturers of which entitled the article to confidence, I have used this food only for infants, both in health and in a number of cases of various diseases, and can only say that, properly prepared, it perfectly fulfils all that can be asked, for it is superior to all others, and I shall employ no other preparation of the kind now in use.

Those ladies (says the Maryland *Med. Jour.*) who desire to stand next on the list of Futures, a fashionable obstetric nurse, will require to be endowed with an unusual amount of prescience, as she informs her patrons that her dates are full up to *a year* in advance. Truly the Americans are a progressive and particularly wide-awake people.

Mathew Arnold had disease of both mitral and aortic valves. In his case the affection appears to have been hereditary, as his father, and two of his sons died from organic heart troubles.

Mineral Springs at Tilsonburg, Ontario.—Dr. Smith, of Tilsonburg, has lately expressed his views as to the therapeutic value of the springs of that place, and is elaborating a plan for the establishment of a thoroughly equipped sanitarium in connection with them. Dr. Croft's analysis of the water, showed the following salts in one gallon of the water :—Sulphate of Lime, 5.75 grains; Chloride of Sodium, 5.62 grains; Chloride of Potassium, trace; Bi-Carbonate Lime as Carbonate, 2.37 grs.; Bi-Carbonate Magnesia, 4.11 grains.—Total 17.85 grains. They will be seen to strongly resemble Bethesda water. We wish the Dr. every success for his scheme.

We regret that an article on page 308, June number, describing "An apparatus for removal of pleuritic effusion," was not credited to the *Med. & Surg. Reporter*, from whose columns we took it.

It is said (*Obs. Gaz.*) that inflammation of the vulvo-vaginal glands is much more frequent on the left side than on the right.

The owners of the London *Lancet* have been offered $400,000 for the journal, and have refused the offer.

Books and Pamphlets.

Intubation of the Laryynx, by F. E. Waxam, Chicago. Published by Charles Truax & Co., 75 and 77 Nassau Ave., Chicago, Ill., 1888.

In this very neat little monograph of about 100 pages, Dr. Waxam has presented to us all that is necessary to be noted in the operation of intubation, and as this new-old method of relieving stenosis of the larynx has come to stay, it is well that the technique and all the important facts concerning the operation should be accessible to all.

Chapter 1 gives the history of intubation, with its fierce struggle for existence, and the survival, shall we say, of the fittest. He also gives detailed accounts of and illustrates various modifications of instruments, and considers that the greatest improvement yet devised is that by himself, of an artificial automatic epiglottis upon the upper end of the tube. The difficulty of securing perfectly free action of this valve, surrounded as it generally must be by swollen tissue, tough adhesive mucus

and exfoliated membrane, and the fatal issue that must follow its obstruction, furnishes me with many doubts as to the value of this modification.

In Chapter 2, some practical points in the anat omy of the larynx are given, with illustrations.

Chapter 3 is clear, concise and perspicuous in the delineation of the technique of the operation, and he who intends to intubate, should carefully note and practise every point here mentioned, unless I should except one of some little importance. On page 44, for the removal of the thread, he advises re-introducing the gag and the finger before drawing on the thread. This I have never found necessary. I cut one of the threads near the mouth and then by bringing the other nearly taut, give it a few gentle taps with the index finger; the short end will be seen to rapidly recede into the mouth and may be easily withdrawn.

The after-treatment is finally considered in Chapter 4, together with the means of overcoming certain complications likely to arise, all of which should be carefully noted.

The time for removal of the tube is discussed, but I should like to have seen some mention made of the indications and contra-indications for intubation, wherein lies a nice field for the discriminating and judicious physician's observations.

In all, this monograph is to be commended to those who purpose intubating. It contains all that is important and nothing superfluous.

THE APPLIED ANATOMY OF THE NERVOUS SYSTEM, by Ambrose L. Ranney, A.M., M.D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post-Graduate Medical School and Hospital. Second Edition. Profusely illustrated. Price $5.00. W. J. Gage & Co., Toronto.

This is without exception one of the best treatises on Applied Anatomy of the Nervous System to be found in any language. It is clearly written, the type good, and the plates are all that could be desired. In reading the ordinary works on the Physiology of the Nervous System, one finds many contradictions, and many confused ideas naturally result. In this work every part is, so far as possible, dealt with separately, carefully, and thoroughly explained so as to leave its teachings clear in the mind of the student. We especially recommend this treatise, for it is a work of great excellence, and we are sure one which the neurologist will find indispensable, while the general practitioner will find it one of the most useful works i his library.

HYSTERIA AND BRAIN TUMOUR; and some othe cases of Nervous Disease. By Mary Putnam Jacobi, M.D. New York and London: G. P. Putnam & Sons.

This is a collection of excellent essays on thos diseases which are so often so closely similar i their clinical phenomena. Hysteria may be sai to be the simulation of all nervous diseases, an the characters of it in its close simulation to man serious organic affections of the nervous system i well shown in this series of essays.

AMERICAN SYSTEM OF OBSTETRICS BY AMERICA AUTHORS. Edited by Barton Cooke Hirst, M D., Associate Professor of Obstetrics in Univer sity of Pennsylvania, Obstetrician to the Phila delphia and Maternity Hospitals, etc. Vol. I Lea Bros. & Co.

The literature of obstetrics and gynæcology i fast becoming so extensive that some reliable sys tem is needed in which the practitioner may fin everything practical and scientific without havin to wade through innumerable pages in support o every new theory. This system is to hand in th work above mentioned, and if the subsequent vol umes compare favourably with this one, we ar sure it will be a work well received and highl prized by the medical profession. We can re commend it highly, it is an exhaustive treatis of the subject and clearly written.

THE LANGUAGE OF MEDICINE: A manual giving th Origin, Etymology, Pronunciation and Mean ing of the Technical Terms found in Medical Lit erature. By F. R. Campbell, A.M., M.D., Prof Materia Medica and Therapeutics, Medical De partment of Niagara University. New York: D Appleton & Co. Toronto: W. J. Gage & Co Price, $3.00.

This work is a useful dictionary, in which i traced the origin and use of all terms used in medi cine. It is a valuable book for students.

OLD SOUTH LEAFLETS. D. C. Heath & Co., Bos ton, Mass.

These leaflets are interesting, containing as they do such matter as 'The Declaration of Independ ence,' 'Franklin's Plan of Union,' 'The Constitu tion of the United States. They are published fo schools and for the trade by the above firm.

THE CANADA LANCET.

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Original Communications.

THE SOFT MYOMA.*

BY DR. A. W. JOHNSTON, DANVILLE, KY.

Knowing full well that your election for this post of honor is not so much due to my own merit, as to the fortunate association with my beloved master, Lawson Tait, also having heard of your deep interest, not only in the practical, but in the abstruse sides of our science, I have decided to bring you a part of the work in which he and I were interested, but which to many societies of general practitioners would prove an insufferable bore; so that if any of you become fatigued with these physiological studies of the uterus, he must lay their infliction at the door of madame rumor, and not charge them up to me, as a sample of deliberate pedantry.

The subject, of which I wish to give only the natural history, is that of the "Soft Myoma," but please remember that I exclude all forms of sarcoma and carcinoma, and speak only of the soft benign growth of the uterus. Those of you who have kept up with the history of this subject, know that until a few years ago this form of uterine tumor was thought to be merely one of the secondary changes of the hard myoma, and that it was believed to be due entirely to a degeneration of the newly-formed muscular fabric which composes the ordinary fibroid so familiar to us all. A few years ago, however, this began to be doubted by some authorities, and what I will now attempt, is to bring forward proof, that from its very inception, it is an entirely distinct tumor, springing from a very different source, having separate histological and clinical histories throughout its course and widely differing terminations.

*Read before the meeting of the Ontario Medical Association, Toronto, June, 1888.

As has been proved, long ago, the hard myoma is an homologous tumor of the uterine wall; the soft myoma being considered a totally heterologous condition; but what I now expect to prove is, that it is not a foreign tissue to the uterine body, but merely an homologous growth of the uterine lining.

That you may understand more thoroughly what my idea of this uterine lining is, I must refer somewhat at length to some papers, all of which form links in a chain, of which this article is only a part.

In August, 1881, I published a paper in the New York *Archives of Medicine*, on the "Origin of the Blood Globules." It was the result of a series of studies of the spleen, the tonsil, thymus and lymphatic glands, as well as the other adenoid structures, which are located along the alimentary canal. In making these studies, I believe I was the first to use the high power immersion glass in studying a development, which I then, for the first time, found going on in the ultimate fibres which compose these tissues.

Throughout them all, I found a new method of cell production—that is, by a process of growth of the minute clots within the fibre. The forming corpuscle bulges out from the thread-like matrix, increases its bulk and richness of granulation, until it finally separates from the parent thread, a fully grown lymph corpuscle. Though I sought carefully for months at that time, and I can now say the same as to years, I have never seen a lymph corpuscle bifurcate, except in an inflamed organ. By this means I sought to establish the fact, that in the adenoid tissues with this special method of development, was stored up material, from which corpuscular supply was constantly replenished, and that on their exhaustion, as is found in extreme old age, depends the senile atrophies, and many of the other wasting conditions of the aged.

Two years and a half ago, while doing Mr. Tait's pathological work, I saw for the first time a healthy specimen of the corporeal endometrium. You can imagine my surprise when I found it to be very closely related to my old friends of the adenoid group. Studying it faithfully, I tried hard to reconcile its condition to the then recognised theories about menstruation. Like all the rest of the world, I had been carried away by the doctrines in regard to the variations in blood pressure,

and while I had had no reason for opposing the views of the leading histologists of the past decade, like Dr. John Williams, and all others who had worked in my line in physiology, I had put one of the effects for the cause, and accepted their dogma, that the blood vessel itself, instead of being merely the means by which nutrition is brought to a rapidly growing tissue, is in reality the *source* from which that tissue springs.

I was peculiarly fortunate in my material, for I was frequently able to freeze and cut a specimen that Mr. Tait had removed from a living subject, before there was any possible chance for post-mortem changes to take place. Among these specimens, I obtained several menstruating uteri, whose conditions I could in no way harmonize with the views of menstruation, as taught by Dr. John Williams. Not satisfied with these specimens which, as some might have said, had already had pathological changes; through the kindness of the staff of the General Hospital in Birmingham, I was given free access to the immense mass of material which its dead house afforded, and for several months spent my leisure time studying the life history of the human endometrium. From this work I was convinced, that not only was Dr. John Williams wrong in his idea of the shedding of the endometrium, but that the endometrium itself, like the lymphatic gland, is another mass of adenoid tissue, whose function is to form the placenta. Like some other organs in the body, the hair follicles and the like it lies dormant for the first few years of extra-uterine existence, and like the thymus gland, finishes its course long before the rest of the economy is exhausted.

By a strange coincidence, just about two years ago, when I gave the results of this work to the British Gynæcological Society (without either of us having the slightest idea of the contents of the other's paper), Mr. Bland Sutton read a paper on "Menstruation in Monkeys," which, so far as it went, fully confirmed every idea which I had advanced in regard to the errors of Dr. John Williams, and all those who claim that menstruation destroys instead of purifying the endometrium. Being satisfied from its integral elements that I had a permanent adenoid tissue to deal with, the question at once came up, Where is its emergent stream which washes away its ripened products common to all other adenoid structures? The answer came at once—It is the menstrual discharge, and it is the spleen, and not the axillary gland to which it is most closely allied. In the herbivora, however, whose comparative anatomy I at once began studying, I found not only the same adenoid tissue, but a lymphatic apparatus which was capable of disposing of any possible amount of corpuscular growth which the cotyledons, under any circumstances, could produce. Thus showing at once that it is the erect position which necessitates menstruation; for with loose lymphatic network, necessary to the passage of a lymph stream, the erect position of the uterus could not possibly be maintained. The lack of this lymph stream also shows the necessity for the maternal placenta, being passed *in-toto*, and not being left to be absorbed, as is the case with the diffuse and multiple, and some forms of the single placentæ.

After these studies of the herbivora, I went more deeply into the comparative histology of the endometrium, the results of which were given to the British Gynæcological Society last June. It would occupy too much of your time to follow out at length the reasonings in that paper, but those of you who wish to see it will find it in the November number for 1887, of that Society's journal. The deductions which I draw from it are that *all* endometria are adenoid, but as there are great variations in the different forms of the placenta of the lower animals, there necessarily must be great differences in the structures of the organs which make them, and, further, that the same endometrium, particularly of the dog, goes through very radical changes, during the cycle of the rut, and that the causes for the widely different descriptions with which the world has been presented by different observers, of the same endometrium, is due to their examining it in different stages of the cycle of the æstrus. But for our present purpose, the principal thing that is necessary to know is, that from the ultimate fibres of the endometrium, no matter to what animal it may belong, there is a greater or less cell development constantly going on.

Last September, before the American Gynæcological Society, I reported a paper, which shows what the arrested development of this organ may accomplish, and what I now wish to give to you is the picture which its one development produces. The first idea I ever had of the real nature of the

soft myoma, I got from a specimen which I helped Mr. Tait remove. Its history was that of most other such growths. Mr. Tait had diagnosed the tumor as uterine, but had half-way suspected pregnancy on account of its extremely soft, semi-fluctuating condition. After watching it, though, until the term should have been fully passed, he decided it to be a myoma, which must be removed.

Although he had watched the case for more than a year, when we had gotten the abdomen open, and exposed the tumor to view, he whispered across the table to me, "I believe it is a pregnancy still." After careful examination, we found it to be a soft myoma, involving most of the body of the uterus. An amputation at the internal os, not only saved the patient's life, but gave me a beautiful specimen. It contained no cysts of any kind, but was composed of a loose mesh-work whose interstices were filled with a fluid lymph, and from whose ultimate fibres a rapid proliferation was going on, so much, so that had I not known exactly where it came from, I would have thought I was dealing with a lymphadenoma.

As you all know, soft myomas are extremely rare, the only other one in which I ever came in contact, I removed successfully, a few months since. Like the one with Mr. Tait—the diagnosis could not be made. An exploratory incision for the relief of either a small ovarian tumor, a soft myoma, or a malignant tumor was done, and the soft myoma revealed in the wound. So extremely deceptive was the sense of fluctuation it gave, that after its removal, one of my assistants, whom I know to be a well-trained surgeon, was willing to wager almost any amount that the tumor contained a cyst. On splitting open, however, we found the same loose mesh-work, embracing many lymphatic spaces, which reminded one very much of the physical condition of a sponge. After cutting and freezing, I found much the same state of affairs as that described in Mr. Tait's specimens, the principal difference being in the presence of a greater or less number of muscular fibres distributed throughout the tumor. Many places, however, showed nothing but the myxomatous tissue, other places showed the young muscle cells of Billroth. In other places, where we had a rapid cell development, which were evidently originated from the ultimate fibres, some corpuscles seemed to be separating from these fibres and floating away in the lymph. Others, again, seemed to be taking on a spindle shape, and going directly on to the development of new connective tissue cells, and, so far as one can tell, to the development of a young muscular fabric.*

Any one who is at all familiar with mucous tissues, can tell at a glance to what class they all belong, and I do not think it would take a great deal of microscopical training for one to catch the relationship between these tissues, and having established this, my object is almost accomplished. For it is the kinship of the parenchymæ of the endometrium and the soft myoma which adds a pathological proof of the adenoid theory of the normal endometrium. The sponge-like interstices give free room to the large amount of œdema which these tumors contain, and it is its presence that gives the deceptive sense of fluctuation which so frequently places the abdominal surgeon in uncomfortable situations. Where this œdema comes from, I think is perfectly plain.

We have known for a long time that the lymphatic apparatus of the human uterus is not very rich, and that it is the discharges through its cavity which fills the place of the large lymphatic trunks, found in the lower animals. When the endometrium begins to develop backwards into the muscular wall, as this tissue for its well being requires a greater amount of lymph than is necessary for the muscle itself, at once there begins a disproportion between the quantity of lymph contained in the uterus and its normal outlets. As the tumor grows, this inequality becomes greater and greater, the result soon being a damming back of lymph within the capsule of the rapidly growing tumor. One of the consequences of this is the formation of lymphatic retention cysts, and this, I believe, is a true history of most fibro-cystic tumors of the uterus. I have never had the opportunity of examining one of these tumors, and cannot say positively whether they embrace more than one condition or not, but am prepared to believe that they are produced by two distinct histological conditions, this being one of them, and the other I would look for in the abnormal or unusual development of some of the uterine follicles. As I have shown, the interstitial tissue of these tumors is exactly that of the endometrium, and why may it

* Here the Dr. showed a plate which, we regret, not to be able to produce.

not contain uterine follicles just as it does in its normal position? These follicles may be simply out-growths from the normal ones, dipping further back between the muscular bundles, just as the mucus tissue does. Or, I say it deliberately, they may spring directly from this mucous tissue itself. This, I know, to all of you sounds like rank heresy, and to some it may appear "The wild imaginations of a fevered brain," for Remak's law has been the statute by which the whole of a generation has been judged, dissensions from which have been visited with the most dire punishments.

Even as a student I was not satisfied with its dogmas, and for ten years most of my leisure time has been spent in the quiet investigation of its claims. Eight years ago, as my old sketch book shows, I had the proof of its fallacy, but then did not understand it well enough to know even what this proof meant. But, "Led on through ways we know not of, and by means we know not how," the discovery of the adenoid nature of the endometrium has helped me to understand those old drawings, and by some studies which are yet unpublished, I have proof positive, that as taught by the last generation, Remak's law, while it has great semblance of truth, still in its fundamental prin ciples is entirely wrong.

I take this first opportunity since my perfect satisfaction of its errors, of putting myself on record as a rebel to the iron-clad system, which its dogmas have built up; but to go deeply into this subject would take entirely too much of your valuable time, and I must leave it with the statement that I hope soon to publish the whole in a separate paper. I think, however, I have satisfactorily shown that the soft myoma is much closer kin to the mucous polyp than to the tough fibroid of the uterine wall, and it seems to me, that in our management of them, we will have better success, if we act in accordance with these views; for I cannot believe, until I have seen better proof than has so far been advanced, that the electric current can have much effect in the absorption of these tumors, for as the lymph forms a very large proportion of their bulk, its removal by tapping, as recommended by Keith, will give considerable relief, and where the patient is near the menopause this is frequently all that is necessary to be done; but in the truly cystic uterus, we cannot hope to gain much if we do not extirpate the whole of the diseased tissue.

In closing, gentlemen, let me thank you, not only for the distinguished honor you have conferred on me, by asking me to be present at this meeting, but also the courtesy with which you have listened to my weak efforts to draw your attention to the tissues themselves, and for a short time to relieve your mind of the wearying search after that "Will-o'-the-wisp," the harmless germicide. All honor to the biologists who are working out and classifying the various orders of the lower grades of life, and deserving of our greatest praise, are those who are showing us the true causes of fermentations, suppurations, and the like death-dealing processes; but it does seem to me that we are not only in danger of going too far in their pursuit, but that we have almost lost sight of the vital force, and are coming to look on the human body very much as we do on the inanimate contents of a gelatin test-tube; so that if by these descriptions of the varying tissue changes I have recalled to your memory that, opposed to these little creatures, there is a force, which if properly taken care of, is capable of the most wonderful conservatism in life, and that it is our duty under all circumstances to most jealously guard it, I will feel that my efforts have not been in vain.

Once more, Mr. President and gentlemen, I thank you, and hope than as the years roll by, this our first introduction will ripen, not only into the respect which fellow workers hold for each other, but that it will cement the esteem which our sister countries and kindred nations now hold for each other.

TYPHOID FEVER.*

BY CHARLES SHEARD, M.D., M.R.C.S., ENG.,
Prof. of Physiology and Clinical Medicine Trinity Med ical School, Toronto.

It is fair to assume when the President of this Association requested me to write a paper upon the "Ravages of Bacteria in Blood and Tissues," that he with characteristic liberality placed the whole field of medicine before me that I might select of what would, in my humble judgment, be most profitable for the Society's consideration. I hope none will be disappointed when they learn they are invited to a discussion upon so old a subject as Typhoid Fever. Neither is it intended to occupy your time in studying the character, habits and

*Read before the meeting of the Ontario Medical Association, June, 1888.

features of those minute organisms known to be materies morbi of this class of disease; but rather would I claim the liberty of dealing with some obscure features in the history of this disease, the study of which may be of service to us and especially in a clinical relation. I invite your attention to the subject of typhoid fever, confident that in it we have much to learn and much to unlearn. Let us stop to consider the conditions ordinarily implied in speaking of typhoid fever—these are, as I understand, them, (1.) Ulceration or inflammation of Peyer's patches and solitary glands. (2.) Inflammation of the *mesenteric glands*. (3.) Softening, and often pulpy degeneration of the spleen; and I state, that save in those cases where death occurs from the direct poisoning of the patient with the materies morbi of typhoid during the first ten days, without the conditions marked, the case is not typhoid, and *I would further state that such abdominal lesions cannot exist without abdominal symptoms.*

It is my belief that many cases of septicæmia of various degrees of severity, and from various causes are mistaken for typhoid, chiefly because we rely upon what is so unscientifically called the "typhoid state." I would briefly refer to a case which I had under my care in the Toronto General Hospital, and where I made such a mistake. The patient, Lelia Whimp, was under my care for the treatment of typhoid for seventeen days, during which she had marked typhoid symptoms, headache, furred and brown tongue, epistaxis, low delirium, and the condition ordinarily seen in typhoid. At the end of seventeen days her typhoid symptoms left her, and marked septicæmic manifestations replaced them, for a subsequent period of twenty-five days, when she died, and I made an autopsy of the case. Confident that I would find the characteristic typhoid lesions, and probably in them trace a cause for subsequent septic inoculations, I searched the abdomen carefully and was disappointed; no lesions existed, no evidences of a healing or healed ulcer were to be found; I searched the large bloodvessels and heart, for a cause of of the later septic manifestations; I searched the brain, hoping that some hidden cerebral abscess might explain away my puzzle, but all was in vain. I regarded the case with grave disappointment, and about to leave it, I caught sight of a slight fulness in the right ankle joint; on opening this I found it filled with the products of a pus-forming inflammation, and on pushing my examination to other joints, I found the right hip and the opposite knee filled with sero-purulent matter and the structures of the joint destroyed. I may say that during life there had been nothing complained of to call attention to the joints. I now present you the temperature chart, which I claim, during the first seventeen days of her illness, much like as one would expect it to be in a typhoid case; here was evidently a septicæmia mistaken for typhoid, by relying on the so-called typhoid state and the temperature chart.

To go back to my original statement, that after the first week abdominal lesions and abdominal symptoms must exist to prove typhoid. I know this will be opposed to the feelings of some, who recall cases of mild typhoid, without such, or any symptoms—the so-called typho-ambulans; but I believe such cases are mistaken diagnoses, and I would dispute the existence of such a thing as typho-ambulans. In support of this I will refer to one of several cases I have observed.

This is the case of Alice Wilson, admitted as typhoid into the Toronto General Hospital. She had no marked *abdominal symptoms*, but other indications of typhoid, brown and coated tongue, headache and epistaxis, lumbar-pain, diarrhœa, and the chart which I show you, and which you will see is from Feb. 3rd to March 3rd, is closely similar to a typhoid chart. Allow me, in criticising this chart, to state it is more like typhoid than usual, because, not only does it show evening rise and morning fall, but it shows a definite rise to a certain height, which was, for a certain time, maintained, followed by a gradual lowering to the normal and a fading away by lysis, as we know typhoid does. What I ask would be any one's diagnosis of such a case, limiting his observations to the first month. I feel it would be typhoid; but this patient, as you will see by her chart, again relapsed—many typhoids relapse—and suffered from recurring febrile attacks. She was allowed out of bed, and walked the ward suffering from March 3rd, with recurring attacks of typhoid, typho ambulatories. Early in April she developed marked symptoms of tubercular disease of both lungs, and physical signs, which revealed only too clearly the disease as pulmonary phthisis. In the middle of May last, one month after leaving the

hospital, I again examined her chest to find the presence of cavities distinctly indicated, and my patient soon to succumb to pulmonary disease. Here is a case where I have no doubt the onset of acute tuberculosis was mistaken for typhoid. I could invite your attention to other cases of tuberculosis where the tubercular disease has been attended by marked nervous symptoms, chronic meningitis with effusion, where the symptoms so closely resembled typhoid fever that it was impossible to distinguish the disease except by post-mortem examination.

I would lay stress upon the error made by so many in relying upon nocturnal exacerbation of temperature as an indication of typhoid. In talking over cases among ourselves, how we say, "I think the case is going to turn out typhoid, he had a rise of temperature last night, and his temperature is down this morning"; or, as a physician once said to me over a case where I held the diagnosis of typhoid in dispute, "Well, the temperature chart shows typhoid." Let me assert that no temperature chart *can* show typhoid. Look at the first twenty-one days of Alice Wilson. Look at Chart 3, which is that from a man who had acute pleuritis with effusion. Look at Chart 4, from a case of true typhoid, and forever disabuse your mind of the thought that there is any actual diagnosis value, so far as typhoid is concerned, in the temperature. Do not misunderstand me, gentlemen. I am not saying the clinical thermometer is useless in this disease. It can distinguish the difference between real and feigned disease; it can show you the degree of acuteness of your case; it can predict a hemorrhage as faithfully as the barometer can predict a storm, but it cannot write the diagnosis for you; it cannot supply brains.

I would say that sudden rises of temperature, followed by a sudden fall, would indicate in the system as it would out of the system, *rapid oxidation*. In the former case, the rapid oxidation of some morbid material which has entered the blood, or which has induced rapid oxidation of the normal elements of the blood and tissue, and I think this material will be found generally to be pus, or dead tissue element. What are the most reliable symptoms of typhoid fever? I assert, again, they are abdominal symptoms; they are tympanitis, pain in the right iliac fossa, gurgling diarrhœa, sometimes a rash: and, at the risk of appearing arbitrary, I will, with your permission, refer to some of these symptoms.

Tympanitis.—In this, I believe, we have the one symptom which is worthy the most special attention; it is not only of diagnostic value, but of the greatest value in prognosis. This tympanitis, in bad cases, comes on early in the attack, about the third or fourth day; the abdomen is then full, hard and tense, the recti muscles rigid, the percussion note drummy. Such cases run the worst course of any in typhoid; in these the prognosis is the gravest, and you can readily see the reason. I think you will admit that after you have passed the first ten days, the danger in typhoid is from one of three causes, viz., *hæmorrhage*, *perforation*, or *asthenia*. Now, if you have the bowel distended with gas, ad-maximum, you have clearly the most favorable condition possible for both hæmorrhage and perforation. The bowel can be paralyzed by distention, leaving its contents to irritate and aid the process of destructive inflammation. If the walls of the intestinal vessels have been weakened, they are more prone to rupture, because of the great distention of the bowel; and the ensuing hæmorrhage more severe from the same cause.

Regarding perforation, I believe the gas in the bowel is more often the cause than the process of ulceration. If you have seen many perforations from typhoid you will remember that most of them were perforations like pricks with a pin, or a trifle larger; the solitary gland had ulcerated away; the muscle had been irritated by the contents of the bowel remaining in a fermenting state in contact with it; the secretions had been suppressed, because of the same distention, and the point thinnest in the bowel gives way under the pressure. Now, is the gas always in the intestine? I think, in many cases, the peritoneal sac is enormously distended with gas. We see in cases of intestinal obstruction, enormous distention. In such cases we have no hæmorrhage, no perforation, and our patient dies, in their absence, presumably from distention. I am of the opinion that abdominal distention can cause death from mere pressure upon the sympathetic nervous system, reflexively slowing the heart's action.

Pain in the abdomen is pretty constant in typhoid, and its absence may be regarded as suspicious, the pain is often nearer the umbilicus than in

the right iliac fossa ; but if we have much ulceration going on we can scarcely avoid having pain, especially if the ulcerative process reaches the serous coat of the bowel, which is here the sensitive membrane, the same as the pleura is the sensitive membrane of the lung, but I can readily believe that in some cases when the lesion is more of a general inflammation and superficial, more of an enteritis pain may be absent.

As to the rash of typhoid, it is an unreliable symptom. I have seen it so marked that it resembled rubeola, save in the crescentic outline of the groups, whilst on the other hand, careful watching failed to reveal a single spot, and in these cases where the rash is typical, the symptoms are generally so well marked, that one does not require the appearance of the eruption to confirm the diagnosis. I think it may be stated generally, that it is in the severer forms of typhoid, the rash is most typical, whilst in mild cases it is most frequently absent.

Another point worthy of attention, is whether or not the typhoid poison may not produce some other disease. In many cases where typhoid appears to be a particularly severe type, the manifestations in the nervous system are also very severe, and perhaps the only marked indications of the disease. If we take those cases, where after the first day or two of illness, coma vigil, or acute delirium marks its advancement, we will find there is little tendency to severe abdominal lesion or symptom ; although the patient may linger on for weeks, early death is the rule in these cases. Again, everyone must have noticed the special liability to severe pneumonic complications, where the type of the disease is severe ; and this pnumonia also appears early, frequently terminating the case before the abdominal disease has progressed very far. Those cases where pneumonia comes on late—as a pure sequela—are in my experience, rarely well marked cases of typhoid, and in many of them I think there is room for doubt as to the correctness of the diagnosis of typhoid. I remember a case of consolidation of one lung, coming on at the sixth week, during a typhoid and terminating the case, but on post-mortem examination the consolidation proved to be not pneumonic, as thought, but tubercular, and limited to one lung. I do not wish to state that pneumonia cannot be a sequela to typhoid, but that it is more frequently an early than a late complication. Again I believe it is quite possible to have a septicæmia arise from typhoid. I mean a septicæmia similar in character to that due to direct pus infection, and am of the opinion that many lingering relapses in typhoid are from this cause. We know it is by no means rare to find a suppurating mesenteric gland near to a typhoid ulcer in the bowel, and there can be no reason why pus there should not enter the circulatory system. Again, where ulcerative endocarditis follows upon the disease there is generally evidence of irritating or septic material having entered the blood vascular system.

As to the lesion of softening and pulpy degeneration of the spleen, this is found in many other diseases besides typhoid, and in the latter is often absent ; softening of the spleen is the result of high temperature, and should the temperature be low throughout, little change in the spleen need be looked for ; it is one of the earliest organs to undergo pyrexial softening, and I do not think it is more predisposed to such change in typhoid than in many other diseases characterized by continued elevation of temperature. It is claimed by some that such tissue change can be entirely prevented by the continued administration of antipyretics, but upon the subject of antipyretics light has yet to dawn ; it is a simple matter to reduce the temperature in any disease, but quite another thing to know if such reduction is beneficial ; those, who in the administration of antipyretics have in mind the lowering of the temperature *only when its continued elevation threatens the integrity of tissue*, have grasped the great therapeutic principle underlying their employment, and I would question the soundness of that principle, commonly practised, which interperets the elevation of temperature as fever and the lowering of temperature as its reduction. If diseases of the zymotic type are changes involving the oxidation of morbific matter, I cannot but think that the lowering of temperature may lead to the storing up of that material and in the end to a greater pyrexial increase.

Thus would I outline some of the difficulties which beset us in our studies of typhoid fever, confident that this disease so common in its occurrence, is less thoroughly understood than many other diseases of less frequency, and as Charcot devolved out of those cases commonly called ataxic

many other vastly different states of the nervous system, so, by careful study in the future, may this disease be resolved into more simple and primitive elements.

To sum up, gentlemen, what I wish to state is briefly this :

1. That save in those cases where death takes place from the action of the typhoid poison directly on the nervous system, there must be intestinal lesion to prove the existence of typhoid.

2. That with such intestinal lesion we will have distinct abdominal symptoms.

3. That acute tuberculosis and septicæmic states are often mistaken for ordinary typhoid.

4. That evening rise and morning fall of temperature, as a proof of the existence of typhoid, is deceiving.

In conclusion, let me express the hope that none will think too severely of me for not more closely following my instructions from the President of this Association to discuss "The Ravages of Bacteria in Blood and Tissues." We now trace almost every pyrexial state to its own peculiar germ, and I am convinced that a paper from me, dealing only with the habits, customs and reproductive methods of all of these various bacteria would, whilst, perhaps, interesting to a section of this meeting, not attain to any particular aim. On this account have I claimed the privilege of drawing your attention to a special disease which has been proved beyond question to be of bacterial origin, and if this short paper may evoke from those before me an expression of their various experiences in typhoid fever, I feel sure the time of this Association will have been well spent.

SAYRE'S "SHORT HIP SPLINT" AS AN EXTENSION APPARATUS IN FRACTURES OF THE HUMERUS.*

BY DR. C. M. SMITH, ORANGEVILLE, ONT.

Owing to the pressure of professional duties, I have been unable to prepare the paper which I proposed to present, and shall merely crave your indulgence for a few moments, while I explain the application of a well-known splint to another purpose than that for which it was originally intended by its inventor. The patient, one of several on whom I have applied a similar apparatus to the one shown, sustained a compound comminuted fracture, one and a-half inches above the condyle of the humerus, separating the capitellum from the trochlear surface and both apophyses from the shaft—the so-called T fracture. The accident happened on the 8th June, 1886, and was caused by the blow of a crank on its downward revolution, while the elbow rested in a bent position on a wooden framework projecting slightly over it at the same time.

This variety of fracture is one frequently followed by the "gun-stock" deformity, in which the external portion is tilted forward with its articulating surface directed forwards, and unites with the shaft and internal trochlear portion, in such a position as to cause anchylosis of the joint, with a marked prominence in the flexure and projection of the olecranon and insertion of the triceps backwards, so that the latter muscle describes a marked curve in its lower portion, with concavity posteriorly, while the joint remains fixed at an angle of about 140°. This occurs more frequently in youth, owing to the fact, that while ossification commences during the second year in the radial portion of the articulating surface, it does not appear in the ulnar portion until the age of twelve. Moreover, while the internal and external condyles ossify respectively at the ages of five and thirteen, the external condyle and articulating surface unite first, and it is not until the age of sixteen or seventeen is reached, that they unite with the shaft. The internal condyle does not unite with the shaft until the age of eighteen.

The wound in the soft parts was situated on the anterior aspect of the arm, about three inches above the joint, and admitted the index finger. The fragments were adjusted, an anterior and posterior concave, rectangular splint, made of tin, applied; a shoulder-cap, similar to the one now exhibited applied, with a perpendicular extension overlapping the upper arm of the elbow splint.

Extension was secured by attaching over all, along the outer aspect of the arm, the Sayre's splint, converting the perineal into an axillary pad and securing the swivel iliac counter-extension pad to the loop in the shoulder-cap. The strap was buckled with moderate firmness around the posterior aspect of the arm, above the elbow,

* Read at the meeting of the Ontario Medical Association, Toronto, June, 1888.

while the semi-circular steel band afforded the lower *point d'appui*.

Subsequently large portions of the elbow splints had to be removed at the edges and under the elbow, in order to allow irrigation and the application of iodoform dressings. Extensive sloughing over internal condyle and olecranon ensued, and the destruction of osseous and soft parts was so great, as to allow the carbolized solution free passage from the site of the original wound through the posterior and inferior openings.

I was ably seconded in the attendance and subsequent dressings of the limb by Dr. Carbert and his son, to whose faithful services the saving of the member was in a great measure owing. The patient was ill-nourished, of a scrofulous diathesis and situated in the midst of most unfavorable surroundings. Owing to these circumstances the prognosis was for a long period doubtful, and amputation was seriously discussed more than once. However, by strict attention to the sinuses and a proper course of constitutional treatment, the condition of the parts warranted the removal of the splints in five weeks from the date of injury. Passive motion was then attempted, but the patient, who had all along proved incorrigible, would not submit to the process.

While the difficulty of maintaining extension is considerable in all oblique fractures of the shaft of the humerus, it is still greater in compound fractures, especially those occurring near the articular extremities. In several of my early cases I adopted the plan recommended by my old friend and classmate, the Secretary of the Association, and placed the limb in a position of full extension. While this plan secured apposition of the fractured ends in cases of injury situate in the lower fourth of the bone, it necessitated *bisement forcé* subsequently, in order to secure a useful joint. I have no doubt my brother practitioners from the rural districts will uphold me in this statement, that such an operation will be persistently described as "breaking the bone over again," and does not tend to elevate the surgeon's reputation. Moreover, with the anchylosis in a position approximating a right angle, passive motion can be supplemented by active efforts of the patient, made in carrying weights, which may be gradually increased as time progresses.

I should have been pleased had it been possible, to present to your notice another case, where the patient was a farmer of advanced years, residing some distance from the town, and in whom the fracture occurred about the junction of the middle with the lower third of the humerus. The result which followed the means adopted and described in this article, exceeded my most sanguine expectations.

I had nearly forgotten an important precaution which must be observed, namely: in order to prevent angular deformity and risk of false joint, the forearm and lower fragment must be secured in a position as nearly as possible corresponding to a right angle; otherwise the extension applied would force the lower fragment backwards.

If I shall have succeeded in making any suggestion which may advance the cause of conservative surgery, I shall deem the object of this paper attained.

Correspondence.

OUR NEW YORK LETTER.

From our Own Correspondent

NEW YORK, July 23rd.

July and August are quiet months in medical circles in this city. The meetings of the various medical societies are discontinued, the Colleges are closed, and most of the leading medical men are off on their vacation. New York, being the medical centre of this continent, something relating to her medical societies, hospitals, etc., may be interesting to your readers. There are thirty-six societies devoted to medicine and its branches in the city. The largest and the one most representative of the whole profession is the Academy of Medicine, whose building is at 12 West 31st Street. The building is centrally located, large, and well adapted for its purpose. On the first floor are two large rooms in which the meetings of the different sections are held. On the floor above this is the library, an excellent one containing some 27,000 volumes, and which is rapidly increasing in size. On the third floor is the reading room, where are about 200 medical periodicals from all over the world. Both the library and reading-room are open to the public, as are also the meetings of the society. Owing to the fact that mostly all doctors in New

York are specialists, or devote themselves more or less to special branches, the Academy is split into ten sections, each section devoted to a specialty, and the members attaching themselves to the section they are most interested in. Dr. A. Jacobi is President of the Academy. Each section again has its own President, and corps of officers, and meets once a month. There are two general meetings a month. These meetings, together with those of some of the other societies, who meet here, make it so that there is a meeting almost every evening, and as the papers are always good and the debates interesting, the Academy is well attended.

There are in this city something like 113 Homes and Asylums for different classes of people,—homeless, orphans, insane, etc., and 49 Hospitals, and 26 Public Free Dispensaries. Lying to the East of the city and a part of the corporation, are a number of islands, splendidly adapted for the purpose they serve. North Brothers Island, to the North-east, affords a place of quarantine for small-pox and typhus. On Randall's Island are Idiot Asylums, and Orphan Homes. On Ward's Island are the City Insane Asylum with 1800 male inmates, The State Emigrant Hospital with 1000 beds, and the Homœopathic Hospital. Then on Blackwell's Island is the largest hospital of the city—Charity—with 1000 patients of all diseases. This hospital is best known for its venereal and skin diseases, of which there is a very large service. Among the hospitals in the city the largest is Bellevue, with 800 patients of all kind of diseases, excepting contagious; and although not so well equipped as some of the other hospitals, it has the most varied service, and affords clinical material for all three colleges. The New York Hospital is probably the finest, and is the most richly endowed hospital in the city. It has a good, large operating room, which is not the case with most of the hospitals, and a good surgical service, so that a good place to see operations is here. Roosevelt, opposite the College of Physicians and Surgeons is another of the wealthy and modern hospitals, has 170 beds and is built on the pavilion plan. Among the hospitals for special purposes, is the Woman's Hospital, 170 beds, magnificently equipped, and where gynæcological operations can be seen at almost every hour. Students and practitioners are admitted to the operations of these and of mostly all the other hospitals and dispensaries.

In New York there are over 2,000 physicians, besides a large number of Homœopaths and Eclectics, and it is not an uncommon thing to see the shingles of three and four doctors in one house. Incomes ranges from nothing to one hundred thousand dollars—a large number of the former, and one doctor, an eminent gynæcologist is said to receive the latter amount from his profession. A young doctor, commencing practice, pays for his office and bedroom, from $500 to $1200 a year rent, according to the locality of the neighborhood he lives in. Owing to the large number of dispensaries, and the rivalry between them to get large classes, the clinical material to be made use of is enormous. Nor are the patients who regularly attend dispensaries poor. Probably one half of them could and should pay for medical attendance, but because of the anxiety of attending physicians to build up large clinics, it is indeed rare that a patient is turned away because of the silk dress or seal skin coat she wears. This is all very well for the attending physician and students, but not so agreeable to the young doctor trying to pay a portion of his rent out of his income.

Among the better families, a trained nurse, in time of sickness, is just as indispensable as a doctor. Within the past few weeks, a training school for male nurses has, through the liberality of Mr. D. O. Mills, been opened in connection with Bellevue Hospital, and woman's particular field of labor is being invaded.

Canuck.

MUTUAL DEFENCE FUND.

To the Editor of the Canada Lancet.

Sir,—In a recent issue of your journal, I notice that several medical men throughout the Province had contributed to the "Leslie Fund," which is in itself very praiseworthy; but could not a fund be started for the defence of medical men who are unfortunate enough to be involved in such cases? I expected that the Medical Association, which recently met in Toronto, would have acted on the suggestions advanced a year ago by Dr. W. H. Henderson, of Kingston, the worthy President of the Association for '88, and organize a fund for mutual defence; but so far I have not seen that any steps were taken in that direction. In support of these suggestions, would it not be practicable for the College of Physicians and Surgeons, to

whose fund we equally contribute, to put a certain amount aside, as a sort of sinking fund, to be used in the defence of any of its members when cases of malpractice are brought against them?

The College is fast becoming a wealthy corporation, and in what better way could it show interest in its members than by devoting a certain amount for the above purpose? We would then feel individually, that in the Council we have a friend that is willing to stand by its members, for, as instanced by the case of Dr. Leslie, any one of us is liable to be made the defendant in a similar case, although all proper care and skill have been exercised.

There are, no doubt, cases of negligence and carelessness shown by some practitioners, who perhaps get but their just deserts by being involved in an action; but it is not for the defence of such that the fund would be used; let money be paid out of the fund only after a recommendation to that effect has been brought in by the committee appointed for the purpose of investigating the cause of action, whether the physician had taken all reasonable care and shown reasonable skill in handling the case.

By such action on the part of the Council, the cost would be shared equally by each member, and would amount to very little; if necessary, an addition to the annual fee could be levied.

Thanking you for the space in your valuable journal, I remain, yours,

ALEX. FORIN.

Collingwood, June 28th, '88.

Selected Articles.

REMARKS ON WHITEHEAD'S OPERATION FOR HÆMORRHOIDS.

BY ROBERT F. WEIR, M.D., NEW YORK.

Last year, in giving my experience of four months' operative work at the New York Hospital, I reported that after trying Mr. Whitehead's plan of operating for hæmorrhoids I had become dissatisfied with the procedure, and had abandoned it in favor of the older and more extensively tried ligation method of Allingham. I beg again to report that after having tried Whitehead's method according to his more recently elaborated plan, I now desire to reverse my judgment, and to speak in favorable terms of the operation.

Mr. Whitehead's first paper on "The Surgical Treatment of Hæmorrhoids" (published in the *British Medical Journal*, February 4, 1882), describes the operation, which he had then practised for nearly five years, somewhat as follows: After stretching thoroughly the sphincter, the hæmorrhoidal masses, involving the whole circumference of the lower bowel, were mapped out into four irregular and unequal lobes. These were divided into four segments by longitudinal sections in the axis of the bowel, and in the furrows marking the intervals between the several lobes. This was accomplished without the loss of any blood. Each portion was then grasped in succession by a ring-forceps and dissected with scissors, at first transversely from the anal margin, and then the dissection was continued upward in the cellular plane to the highest limits of the hæmorrhoidal growths, in some cases to a distance of an inch and a half. Each segment was thus converted into a quadrilateral, wedge-shaped mass, the base below consisting of the hæmorrhoid, and the apex above of the healthy mucous membrane of the bowel. The mucous membrane at the highest point was next transversely divided, leaving the hæmorrhoids simply attached by loose cellular tissue, and the vessels proceeding from above and supplying the mass below. The forceps containing the hæmorrhoids was then twisted until this connection was severed, and the hæmorrhoids then removed. The divided surface of mucous membrane was next drawn down and attached by several fine silk sutures to the skin border at the verge of the anus.

The other portions having been treated in the same manner, the operation was completed.

My first series of operations was undertaken after perusal of the above directions. I did not find that it was easy or at all satisfactory to attach the divided mucous membrane to the verge of the anus, and perhaps from my defective appreciation of this operation I do not fairly carry out its details into thorough effect. It was, therefore, not until Mr. Whitehead had published in the *British Medical Journal* of February 26, 1887, an article entitled "Three Hundred Consecutive Cases of Hæmorrhoids cured by Excision," that I learned better how to operate according to his method, which he then more completely detailed in the following words: "After the sphincters have been thoroughly paralyzed by digital stretching, by the use of the scissors and dissecting forceps the mucous membrane is divided a short distance from its junction to the skin, for it is very important," he says, "that no skin should be sacrificed, however redundant it may appear to be." In this second paper it will also be observed that the quadrilateral section of the hæmorrhoidal masses has been abandoned, and exsection of the lower portion of the rectum is accomplished *en masse*. The further steps of the operation are thus conducted:

The external, and commencement of the internal,

sphincters are, after the liberating cut about the anus, exposed by a rapid dissection, and the mucous membrane and attached hæmorrhoids, thus separated from the submucous bed upon which they rested, are pulled bodily down, and divided points of resistance being snipped across, until they are brought below the margin of the skin at the anus. The mucous membrane above the hæmorrhoids is now divided transversely in successive stages, and the free margin of the severed membrane above is attached, as soon as divided, to the free margin of the skin below by a suitable number of sutures. The complete ring of pile bearing mucous membrane is thus removed in successive snips. The bleeding vessels throughout the operation are twisted when divided. The operation is done as is usual in the lithotomy position. Before the wound is closed iodoform is blown in between the raw surfaces. For the stitches carbolized silk is used. These are not taken out They are allowed to come away of themselves without further interference. In the three hundred cases reported by Mr. Whitehead not a single death or instance of secondary hæmorrhage, or any complication, such as ulceration, abscess, stricture, or incontinence of fæces has occurred.

Since last October I have had occasion to resort to this operation in six severe cases of hæmorrhoids. The first occurred in a man, aged thirty-two, who had had hæmorrhage from the rectum, to a greater or less extent, for nearly ten years, with occasional intervals of freedom from the loss of blood. On October 28th, an operation according to Whitehead's method (see Figs. 1 and 2) was done, with the removal of nearly three-quarters of an inch of the entire circumference of the rectum, which con-tained throughout evidences of hæmorrhoidal changes, marked in four places by swellings, which, prior to the removal, were as large as a hickory-nut, and in other parts by numerous varicose veins of varying size. At first there was some difficulty in dissecting up the mucous membrane from the protruding pile, and, in fact, this cannot be done, as the hæmorrhoid involves the mucous and submucous tissues. It is necessary to go somewhat through the pile, looking out carefully for muscular tissue, and keeping to the inside of this until the mucous membrane, recognized by its lighter color, is reached above the pile region. After this latter membrane has been found its separation from the muscular tissues is very easy, only an occasional snip of the scissors being required to detach adhesions, muscular or otherwise. Much less pain was experienced after this operation than is often observed after the operation of ligating piles.

On the eighth day the line of suture was entirely healed. The stitches were not removed, but were allowed to come away of themselves. A week later he was discharged from the hospital perfectly well, with a clean and well-shaped anus, only one or two stitches being still found attached to the skin. These, however, were not troubling the patient. He was seen several months later, and the anus presented a perfectly satisfactory appearance.

The second case was met with in a man, aged, thirty, whose hæmorrhoidal protrusions occurred

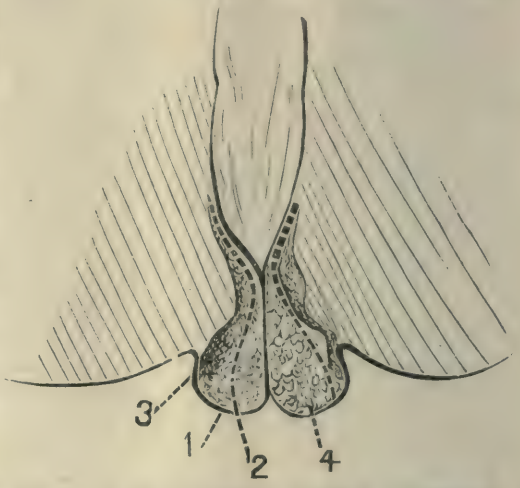

Fig. 1.—1, Muco-cutaneous junction, exaggerated ; 2, line of incision, a short distance from muco-cutaneous junction ; 3, external sphincter muscle ; 4, protruding pile.

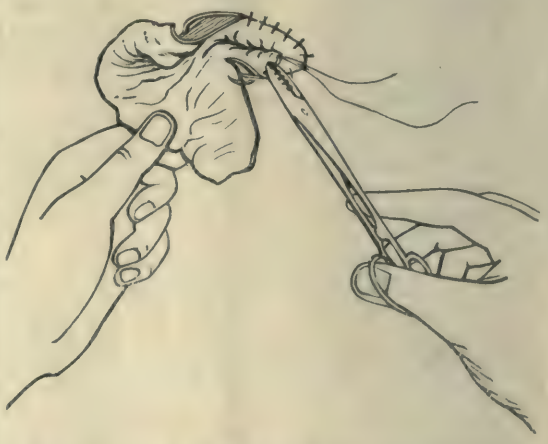

Fig. 2.—Mode of cutting off pile-bearing mucous membrane and stitching it in repeated sections.

one year ago after straining at stool. They have continued at times to bleed. Associated with these was a painful sensation in the rectum. By examination a circle of moderate-sized hæmorrhoids was seen extending all around the lower edge of the rectum, two of which were ulcerated.

On November 5th, Whitehead's operation was performed according to the manner above described. Nearly an inch of the rectal mucous membrane was removed. Bleeding vessels to the number of

two or three only required to be twisted. The mucous membrane was cut away half an inch at a time, and stretched to the skin by interrupted fine black silk sutures, and so on until the whole circumference of the bowel was removed. The patient progressed to recovery without any special pain or reaction; urinating voluntarily accomplished throughout. On the seventh day after the operation the bowels moved without pain, and on the twelfth he was out of bed and walking about. The stitches were removed as the wound was entirely healed, and he was discharged from the hospital on November 23rd.

The third case was a man, aged forty-eight, who in addition to his having hæmorrhoidal swelling of considerable size, just within the sphincter, which protruded and gave rise to frequent hæmorrhages, and to a certain amount of pain, had also sensations of uneasiness higher up towards the top of the pelvis, with discharges at stool of rather small tape-like fæces. He complained also of occasional attacks of constipation and colicky pains, with distention of the abdomen, which was relieved by medicine or by spontaneous diarrhœa. Being unable to satisfy myself by digital exploration whether or not a stricture of the rectum somewhat higher up existed, the patient was etherized, and nothing having been felt by palpation in the abdomen, a manual exploration of the rectum was made. By the gradual stretching of the sphincter and of the bowel the hand was introduced up to the knuckles, and slightly beyond them, though the thumb was not passed within the intestine. By this insertion the promontory of the sacrum was recognized, and with the other hand on the abdominal wall nothing was felt in this region. Believing, therefore, to have excluded the suspected stricture, the removal of the hæmorrhoids was undertaken after Whitehead's method. A certain amount of vertical laceration had occurred from the excessive distention of the anus, so that the operative procedure was conducted more after the original plan of Whitehead than after his later procedure. About one inch of the rectum was removed in this way. A longitudinal slit having run up beyond this point, it was sewn together by sutures. Only one suture was required to a bleeding vessel; the others, three in number, were secured by torsion. A plug of iodoform gauze was introduced into the rectum, and an antiseptic compress and bandage applied. The patient suffered a good deal of pain after the operation, and required once to have the urine drawn. The seventh day he had a movement of the bowels, with but little pain On the eighth day the wound was found to have united primarily, with the exception of an area of one-third of an inch in diameter, which had been caused by a stitch giving away. On the thirteenth day he was up and about. The sutures came away spontaneously.

Case IV.—A man, aged forty-five, had been troubled for several years with bleeding hæmorrhoids of large size. When protruding they resembled, in size and appearance, a small tomato. The operation was done as in the previous case. Nearly an inch of the lower end of the rectum was removed. The line of junction was effected by more numerous sutures than had been used in the preceding cases. No reaction whatever followed. The patient urinated voluntarily, and no pain was felt. On the third day he was sitting up in bed, writing, and on the sixth day was about. The majority of the sutures were removed by me before the tenth day. Primary union took place, with a very well-shaped anus and smooth bowel beyond the point.

Case V.—A burly, strong man, with large hæmorrhoidal protrusions, bleeding freely, which had lasted for several years. In this instance a departure was made from the ordinary stage of the operation in this, that instead of cutting off the mucous membrane in small segments, and then suturing the same to the skin, the whole circumference of the detached rectum was removed and then the sutures applied. This necessitated the use of clamps to seize and draw down the otherwise retracting mucous membrane, and thereby giving rise by its pressure to a certain amount of damage to the mucous membrane. The procedure, however, rendered a trifle more rapid the operation, which in itself is somewhat a tedious one.

Case VI.—Was a man, aged forty-seven, who had been troubled by large piles coming down and being caught in the sphincter, thereby giving rise to a great deal of annoyance, though not complicated by much bleeding. It was supposed that Allingham's operation might have sufficed for this case. After stretching, however, the sphincter by gradual pressure in various directions, the hæmorrhoidal mass was seen, consisting of three very large piles, and one small one, and further, that the whole zone of the rectum was in a varicose condition. Whitehead's operation was thereupon resorted to, and was accomplished with a little more difficulty than usual, from the oozing of blood from the numerous divided veins. This patient was catheterized during the first twenty-four hours, though, I believe, with a little more effort, assisted by the kneeling posture, he could have emptied his bladder without this assistance. The subsequent progress was free from pain. The patient was able to sit up in bed squarely upon the affected part at the end of the third day. He was out of bed and dressed within a week from the operation. The stitches were not removed. They discharged themselves spontaneously.

While for the less severe cases of hæmorrhoids the operation of injection with carbolic acid (and preferably with the 1 to 20 solution) is to be first thought of, and while for the more decided form

of this disease Allingham's method yet stands unequalled, yet for the extensive conditions of hæmorrhoidal disease met with in the preceding cases, and which have been hitherto treated by tying off three, four, and sometimes more masses, I believe that greater efficacy and greater permanence of cure will be accomplished by the resort to Whitehead's method, and that less after-discomfort to the patient will be felt than by the well-known method of ligature as practised by Mr. Allingham. It is true, with this rather brief experience, the admission is to be made that the operation of Whitehead has taken me much longer time to accomplish than the older operation of tying and removing hæmorrhoids. Increased experience has, however, taught me that greater rapidity of execution can perhaps be accomplished by a manœuvre which doubtless Mr. Whitehead practises, as it is so self-evident, but which he does not mention. It is this: after separating the mucous membrane at the anus by scissors, all around, then at one limited place conduct the dissection deeper, and in an upward direction, until the normal mucous membrane of the bowel is reached. From that point, by means of the finger-nail, or by the end of a blunt-curved scissors, the mucous membrane can be stripped from the external tissues down close to the circumferential initial incision about the anus, when any intervening tissues can be cut through quickly with the scissors. In this way, proceeding right and left, the separation of the bowel in the last two instances has been brought about with decidedly increased rapidity and certainty.

I have been surprised to find how small, after dividing the mucous membrane, the arteries entering the piles become. Palpation of the same through the rectum, prior to their section, had led me to expect them to be of a decidedly increased volume; but with the open section they have not only shown themselves quite small, but they will often spontaneously cease to bleed. It is seldom that they require to be twisted or tied with catgut; certainly not more than one or two in the course of the operation, and these have, in one or two instances, been closed permanently by the pressure of a clamp for a few minutes.

After quite an extensive separation of the rectum, even to some distance above the line of section, it has been found unnecessary to introduce any drainage. In none of my cases have I dusted them with iodoform, as Mr. Whitehead has suggested, and when placed in position prompt union occurred, though the parts were bathed with the usual sublimate solutions—1 to 5,000. The tabs of skin that have been preserved for the final union of their edges to the mucous membrane often remain swollen for a week or ten days after the operation, and may excite some apprehension on the part of the surgeon for the patient that a mass of external reminiscences of the sufferer's past troubles might remain. In three cases where this condition has been watched they have in time disappeared.

As to the possibility of the formation of a stricture, especially where, as in one of my cases, a certain failure of primary union occurred in two spots in the circumference of the wound, I felt some apprehension; especially as this is a condition of affairs that I have encountered a number of times in patients who had been operated upon by surgeons of a past era, by the older method of ligation, so zealously carried out that no mucous membrane was left between the various hæmorrhoidal tied-off bunches. But Mr. Whitehead's positive statement must be kept in mind that this has not been observed in any of his large number of cases. He, however, lays stress upon the necessity of making the primary incision in the mucous membrane near to the skin of the anus, and not in the skin itself, since he believes, and I should think with justice, that undue contractions are more apt to take place when the annular cicatrix is formed at the expense of the integument.

A slight caution I may give, based upon an experience in rectal operations generally, that the bowels should not be moved by any purgative the day of the operation, as is commonly advised. This had better be done the day previously, if at all. Should this error have been brought about, as sometimes it has occurred to me, from a too zealous nurse, it is better to thrust a sponge some distance up the bowel at the beginning of the operation. This preserves the wound from infection, and the surgeon perhaps from profanity.—*The Medical Record.*

HEART TONICS.

BY J. C. MULHALL, M.D., KANSAS.

To present you with even an abstract of all that has been written within the last two years concerning the subject of my paper would impose on you a wearying and confusing detail. A number of entirely new drugs have been introduced, and the more intelligent use of several almost forgotten ones has been revived. Observers, the world over, having tested these various drugs, have rushed pell mell into print with their conclusions, and the proverbial disagreement of doctors has resulted. In the case of each drug, I have taken into consideration the conclusions of one or more admitted authorities, and have tested for myself such conclusions, only, however, at the bedside.

That there exists a necessity at times for a substitute for digitalis, equally powerful with that magnificent drug, will be readily admitted by every one who has been much concerned with the

treatment of heart disease. That many lives have been suddenly shortened through the cumulative action of digitalis cannot be denied. Who has not seen his anasarcous patient, with failing heart and sluggish kidneys, revive under the influence of digitalis, his pulse beat grow slower, stronger and more rhythmical, his urinary secretions augment, his dropsy decline, when all at once the happy friends are thrown into alarm at seeing the patient grow nauseated, vomit, and refuse longer to eat? What chance have the weary heart walls for the nutrition that is to give them more permanent strength than that afforded by a drug, when the alimentary canal refuses to obey its functions? We are compelled to withdraw digitalis and frequently to await the return of the stomach to its duties, before again venturing to administer the drug. The delay may be fatal. The heart may again rapidly fail to a greater degree than before, and be beyond the help of tonics. I have in my mind two individuals who having thus experienced nausea and vomiting, were never again able to take even a single dose of digitalis.

Again, with certain cases we are unable to get the happy effects which in the vast majority of cases we do get from digitalis. Physicians have with reason, therefore, sought to find a drug which, if not equally potent, was at least a powerful ally. This list experimented with includes convallaria majalis, adonis vernalis, the various salts of caffeine, sulphate of sparteine and strophanthus hispidus. Before the introduction of the last named drug I had frequently prescribed convallaria and adonis vernalis. I mention both in the same breath, for, as far as I could determine, the only clinical difference was that the diuretic effect of the adonis vernalis was far better marked than that of the convallaria. The first great objection was their abominable taste, and in the fewest cases I treated, the stomach very quickly exhibited repugnance to their continued administration. It goes without saying that like in pulmonary phthisis, so in the individual with ruptured compensation and failing heart muscle, the first great avenue of approach, the stomach, must be maintained in tolerant and vigorous condition. Both drugs certainly slowed and made more vigorous the heart's action, and are justly entitled to the name, cardiac tonics. Though they seemed to act more quickly than digitalis, their beneficial effect also seemed to cease at once with their use, thus differing in an important way from digitalis. Again, their tonic effect on heart and arteries was not nearly so well marked as that of digitalis, and they therefore never exhibited such prompt and magical relief to cardiac dyspnœa or dropsy as we often see from digitalis. I should say that at best they were poor allies to digitalis and very inefficient substitutes for strophanthus, caffeine, or sparteine.

I have used but one salt af caffeine, the citrate, in quantity not exceeding twenty-five grains, usually fifteen, in twenty-four hours, and have administered it in five cases, not a large number but sufficient to enable me to call it a valuable adjuvant in the treatment of heart disease. It acts much as digitalis does, being a heart regulator and diuretic, but again, though acting more promptly than digitalis, it did not seem to me to produce so slow, regular and powerful a pulse beat as the latter. It was in each instance well borne by the stomach. In one case, it seemed to be completely useless, and though in the same case, one of mitral regurgitation in a child, the substitution of digitalis was more efficient, compensation was never established and the patient died.

Five years ago a woman aged 31, and her brother aged 22, both the subjects of mitral stenosis came under my observation, and to the present date have remained my patients. Some months since I was called to see the woman who was in the seventh month of her third pregnancy, on account of alarming dyspnœa, and increasing œdema of the lower extremities. Judge my astonishment when I found the loud, harsh, jarring, presystolic murmur, which in this very patient I had often demonstrated to various students, to have completely disappeared. There existed, however, the constant signs of mitral stenosis, and furthermore that of a failing right ventricle, an occasional tricuspid regurgitant murmuring being audible. This patient took during the remaining two months of her pregnancy five grains citrate caffeine three times daily with the happiest effects upon her circulation. Her physician after her delivery, fearful that the caffeine might not prove powerful to carry her through the trying ordeal, with my consent substituted digitalis for a month succeeding. I may add that, having called on her six weeks after delivery, I found again the old familiar presystolic murmur. I decided on caffeine as her heart tonic, from the fact, that previously digitalis had on several occasions caused her nausea and loss of appetite. How much this heart tonic had to do with her full term and delivery I cannot say; but it seemed hardly possible to me that a woman with mitral stenosis, and a failing heart at the seventh month, could without some such assistance have happily completed gestation, and the citrate of caffeine seemed to meet the indications perfectly.

In combinations with squill and acetate of potash its diuretic effects were well marked.

Used alone, as compared with digitalis, I did not think its diuresis so well marked. In one case of combined aortic and mitral regurgitation, where there existed much precordial pain and distress, where relief to this latter symptom did not follow the administration of digitalis, the patient asserted that the substitution of caffeine was a most happy one, since his cardiac pain vanished on the third day of its administration.

With sulphate of sparteine I have had but one experience, not having been able to procure the drug, a fact I regret, since the reports of Prof. Germain Sée would lead us to believe that its tonic effect on the heart was remarkable. He announced firstly, that its reparative effect on the heart and pulse was more marked, prompt and lasting than digitalis or convallaria; secondly, that in the immediate regularization of the cardiac rhythm no remedy can be compared with it; and thirdly, that it was acceleratory to the heart beats.

My one experience was on a patient suffering aortic regurgitation and obstruction and also mitral regurgitation. The heart was enormously enlarged, and its tumultuous, irregular, intermittent action, 96 to the minute, most distressing to the patient. Anasarca was general, ascites to a moderate degree, and œdema at the base of both lungs. Here I thought was a heart whose rhythm needed control, and confident in the recommendation of Prof. Sée, I administered one-half grain of the sulphate of sparteine three times daily, and I must say with disappointment. The pulse remained intermittent, full at one beat, empty at another, and as before 96 to the minute. After three days trial I substituted digitalis and the bromides with good effect. But one may judge nothing from one case, and indeed this case may not have been an appropriate one for the remedy.

Immediately upon reading the paper of Professor Fraser, of Edinburgh, on the remarkable results achieved by him with strophanthus in the treatment of cardiac dropsies, Mr. J. M. Good, of St. Louis, procured from Lehn & Fink, of New York, a reliable tincture made by Merck, of Darmstadt, this being the preparation which I have used in twenty-one cases of various cardiac disturbances.

Professor Fraser's general conclusion was that whilst it was a true heart tonic, like digitalis, unlike the latter it did not increase arterial tension.

Dr. Leon Rosenbusch, in the *Berliner Klinische Wochenschrift*, Feb. 13, 1888, makes the following conclusions: 1. It has a marked action upon the heart, increasing the power of and lengthening the systole, increasing the arterial tension and slowing the heart's action. 2. It strengthens the heart muscles and regulates its work. 3. It acts as a diuretic in cardiac disease, but very feebly in kidney disease. 4. It does not disturb digestion as other heart poisons do, especially digitalis. 5. It may be given for weeks without giving rise to cumulative action. 6. It is best employed in the form of a pure tincture in doses of 10 to 20 drops three times daily. 7. It is less vigorous in its action than digitalis, and is therefore indicated especially in those cases in which digitalis has not yet been tested. 8. It maintains, especially in severe disturbances of compensation, the effect of digitalis which has previously been administered. 9. The alcoholic tincture should be employed. 10. In stenosis of the aortic valves its action is negative; as it lengthens still more the systole, it should not be employed in this disease.

With these conclusions, I may say that my own humble experience mostly coincides. I am not sure however that it increases arterial tension, for it is in a class of cases where arterial tension is a marked feature, namely, chronic diffuse nephritis with sequential heart disturbances that I have seen the most brilliant effects in slowing the heart's action. I refer particularly to one of the phases in Bright's disease with general arterial sclerosis and hypertrophied heart, wherein sudden attacks of painful palpitation with pulse extremely irregular and increased to from 120 to 160 beats per minute, possibly a uremic phase, lasting sometimes for days, nearly always accompanied with a nausea that rejects digitalis. In four such cases five drop doses of tincture strophanthus repeated every six hours, rapidly slowed the heart, produced a regular pulse, and increased the flow of urine. It might, therefore, seem that since it controlled these hypertrophied hearts, it had a marked influence on the cardiac ganglia. In a case of acute dilatation of the heart, the first attack occurring without discoverable cause at the menopause in a lady whom I have treated in three such attacks, the first two with digitalis and the last with strophanthus, the latter acted far more promptly and far more agreeably to the patient. It has advantages over all other cardiac tonics in its palatability, smallness of dose, and acceptance by the stomach. I have not seen the astonishing diuretic results reported by Prof. Fraser, where after one full dose, the secretion of urine continued to augment for several days. After all neither strophanthus nor other heart tonic can be compared in power to digitalis. They have certain advantages, they act more promptly, they are not cumulative, they are better borne, caffeine and striphanthus do not nauseate and do not require the careful supervision of the physician as does digitalis. Hence where a gentle cardiac tonic is to be exhibited for a long time, one other than digitalis would seem to be indicated. They are therefore very valuable allies. But when the heart is trembling on the verge of fatal asystole, when its quivering muscular fibres have almost given up the contest against the unyielding obstruction, no such powerful reinforcement has yet appeared on the field as digitalis.

When on the other hand it has lent its power to the heart, and its cumulative effect is dreaded, or the digestive tract is disturbed by its presence, the compensation that it has effected can then best be carried on, I think, by strophanthus.—*St. Louis Courier of Medicine.*

METHODS OF DISINFECTION RECOMMENDED BY THE MICHIGAN STATE BOARD OF HEALTH.

In diphtheria the discharges from the throat, nose, and mouth are extremely liable to communicate the disease, and should be received in vessels containing a strong solution of copperas (sulphate of iron), or on soft rags or pieces of cloth, which should immediately be burned.

In typhoid fever and other dangerous communicable diseases the discharges from the kidneys and bowels are dangerous, and should therefore in all cases be received upon papers or old cloths and promptly burned, or be received in vessels and thoroughly disinfected as follows: Disinfect each discharge from the bowels by thoroughly mixing with it at least one ounce of chlorinated lime in powder, or one quart of "Standard Solution No. 1,"* recommended by the American Public Health Association's committee. In country districts, villages, and small cities, where the privy is not far distant from a well, discharges should not be thrown into a privy-vault, but after being disinfected, they should be carried a greater distance from any source of drinking water and then covered with earth. Rags, closet-paper, or other similar material used about the patient, should be immediately burned. Privies, water-closets, cess-pools, gutters, drains, sewers, etc., should be frequently and liberally treated with copperas solution. Sulphate of iron (copperas) dissolved in water in the proportion of one and a half pounds of the sulphate to one gallon of water, is a good solution for chamber-vessels, water-closets, etc. When much is wanted it may be prepared by hanging a basket containing about sixty pounds of copperas in a barrel of water.

Nurses and attendants should be required to keep themselves and their patients as clean as possible; their own hands should frequently be washed and disinfected by chlorinated soda. Soiled clothing, towels, bed-linen, etc., on removal from the patient, should soon be placed in a pail or a tub of boiling-hot zinc solution, made in proportions as follows: Water, one gallon; sulphate of zinc, four ounces; common salt, two ounces. Soiled clothing should, in all cases be disinfected before sending away to a laundry, either by boiling for at least half an hour (it may well be boiled in a zinc solution), or by soaking in a strong solution of chlorinated soda.

Cotton, linen, flannels, blankets, etc., should be treated with the boiling-hot zinc solution, introducing them piece by piece, securing thorough wetting and boiling for at least half an hour. Heavy woolen clothing, silks, furs, stuffed bedcovers, beds, and other articles which cannot be treated with the zinc solution, should be hung in the room during fumigation, pockets being turned inside-out and the whole garment being thoroughly exposed. Afterward they should be hung in the open air, beaten and shaken. Carpets are best fumigated on the flour, but should afterward be removed to the open air and thoroughly beaten. Pillows, beds, stuffed mattresses, upholstered furniture, etc., after being disinfected on the outside, may be cut open and their contents again exposed to fumes of burning sulphur. In no case should the thorough disinfection of clothing, bedding, etc., be omitted. Infected clothing and bedding have been known to communicate diphtheria months after their infection. The body of a person who has died from scarlet fever, diphtheria, smallpox, or typhoid fever, should be wrapped in a cloth wet with a strong solution of chlorinated soda, or with "Standard Solution No. 1," or with zinc solution. The zinc solution should be made in proportions of one half pound of chloride of zinc to one gallon of water, or:—Water one gallon; sulphate of zinc, eight ounces; common salt, four ounces.

TEMPORARY SHELTER DURING DISINFECTION.

Disinfection of a room always necessitates vacating it, and sometimes makes it impossible to remain in adjoining rooms, therefore in some cases it seems essential to have hospital, tent, or other temporary shelter for the inmates of infected houses, where bathing, disinfection, and washing can be done while such houses are being disinfected and put in order. On this subject local boards of health should be consulted, and should be prepared to act.

DISINFECTION OF ROOMS.

After a death or recovery from a dangerous communicable disease the room in which there has been a case of such disease whether fatal or not, should, with all its contents, be thoroughly disinfected by strong fumes of burning sulphur. Rooms to be disinfected by sulphurous fumes must be vacated by persons, but the contents should all remain for disinfection. For a room ten feet square at least three pounds of sulphur should be used; for larger rooms proportionately increased quantities, at the rate of three pounds for each one thousand cubic feet of air-space. Hang up and spread out as much as possible all blankets and other articles to be disinfected; turn pockets in clothing inside out, and otherwise facilitate the access of the sulphurous fumes to all infected places. Close the room tight, place the sulphur in iron pots or pans which will not leak, supported on bricks over a sheet of zinc or in a tub containing water, so that in case melted sulphur should leak out of the pot the floor may not be be burned; set the sulphur on fire by hot coals or with aid of a spoonful of alcohol lighted by a match; be careful not to breathe the fumes of the burning sulphur, and

*Dissolve cloride of lime of the best quality in soft water in the proportion of four ounces to the gallon.

when certain the sulphur is burning well leave the room, close the door, and allow the room to be closed for twenty-four hours. The privy should be disinfected by fumes of burning sulphur. It is especially important that the *contents* of the privy be disinfected. For this purpose use four ounces of the best quality of "chloride of lime" to each gallon of material in the vault.

MEDICAL NOTES.

If patient can cross the legs there is *rotation in the hip joint* of the limb raised. (Allis.)

For *constipation of infants*, Prof. Parvin recommends, as a simple expedient, rubbing the abdomen with a little sweet oil.

Prof. Da Costa says the proper method of examining a patient for *dilatation of the stomach* is by percussion after he has drunk a large quantity of water.

Flapping of alæ of nose is indicative of *disorders of respiration* in infants, while pinched appearance of mouth is present in gastro-intestinal troubles. (Parvin.)

Professor Bartholow recently treated a case of *hæmaturia*, due to acute congestion of the kidneys, by giving 10 grains of quinine three times a day, which was followed by rapid recovery.

The best astringent for *chronic diarrhœa* of children is extract of hæmatoxylon. This remedy dyes the discharges and also discolors the napkins. Therefore, do not be scared. (Parvin.)

Frequently the direction of blood vessels will aid in distinguishing the bowel from the sac in *hernia*. The vessels of the bowel are arranged transversely, while in the sac they are more longitudinal. (Brinton.)

Dr. Rex states that he has had very gratifying results by treating *convulsions of children* in the following manner: Give the child a hot bath, or, if this be inconvenient, a hot mustard foot-bath may be substituted; then give 3 grains of sodium bromide every ten or fifteen minutes until the convulsions cease.

A case of *muscular rheumatism* presented to the clinic was treated by giving, internally, 20-grain doses of muriate of ammonium three times a day, and, externally, a liniment containing —

℞ Aquæ ammonii, . . . f ℥j
Spirit. rosmarini, . . . f ℥iij
Liniment. saponis, . . f ℥ij. M.

One of the best methods of removing *foreign bodies* from the external auditory meatus, when the tympanic membrane is intact, is by injecting water in the ear; which, in most cases, will pass between the membrane and foreign body and force it out (Dr. Hearn.)

For a case of *enlarged spleen*, Prof. Da Costa ordered half-drachm doses of fluid extract of ergot, three times a day; 4 grains of quinine each morning, and over the abdomen—

℞ Iodinii, ... ℥ ss
Ung. belladonnæ,
Lanoline, . . āā . . ℥ ss. M.

For a case of *idiopathic epilepsy* in a boy aged eleven, Prof. Da Costa ordered a prescription :—

℞ Potassii bromidi, . . . gr. xx
Tinct. cannabis indicæ, . gtt. ij
Syrup., . . . q. s. ad., f ℥ ij. M.
Sig—Take three times a day.

Milk and vegetable diet. To prevent the paroxysm, inhale five minims of nitrite of amyl.

The best remedy for *tapeworm* is pomegranate, but must be given in the proper way. Clean out the canal thoroughly, and for this the soda salts are good, preferably the phosphate of sodium to dissolve the mucus in the canal, which must be given in the intervals of digestion, followed by a purgative; then give a strong decoction of pomegranate bark, four ounces of the fresh bark to one pint of water, and boiled down to eight ounces; follow this by a purge. (Bartholow.)

For *chronic eczema*, Prof. Holland recommends the following treatment: Soften crusts with oleaginous preparation or bread poultice, and remove them; then apply the following :—

℞ Liq. carb. deter., . . . f ℥ j
Aquæ rosæ, ... f ℨ viij.

The liquor carbonis detergens is made of coal tar, 4 parts; tinct. soap bark, 9 parts. Shake together and let stand for eight days; then strain, and it is ready to dilute for use.—*Coll. and Clin. Rec.*

CARBOLIC ACID IN THE TREATMENT OF ENTERIC FEVER.

The patient is of course confined to bed, in a well ventilated room if possible, and every effort is made to insure that no particle of solid food of any kind is administered by over anxious relatives. The diet is restricted to milk, toast-and-water, barley-water, and calf's foot jelly; new milk is always insisted upon as the main support, from a quart to three pints being giving to an adult in the twenty-four hours. The carbolic acid is ordered in a mixture, of which this is the prescription: Take of carbolic acid (Calvert's extra pure for internal administration), twelve minims; tincture of iodine (B. P.), sixteen minims; tincture of orange-peel, one drachm and a half; simple syrup, three drachms; water to eight ounces: the dose to

be an ounce every four hours for the first fortnight, or until the urgent symptoms yield, when the same dose is administered three times a day. The good effect is manifested almost immediately. In two days the pulse shows and gains in strength, the temperature falls, the tongue becomes moist, all diarrhœa cases, and the general condition of the patient is so much improved that, as a rule, in a week all anxiety is at an end, and the case progresses quietly towards recovery. It sometimes happens that a case is cut short by this treatment as suddenly as is a case of acute rheumatism by the exhibition of salicylate of soda; but more generally the fever runs its course of thirty days before all danger of relapse is past, and I have found it better to continue the medicine until the thermometer shows no rise of temperature for three or four clear days. If the pulse at any time rises above 120, the temperature 105°, or if sordes form on the lips or teeth, either champagne or brandy, and sometimes both, are given every two hours. This, however, is rarely necessary. Complete abstinence from any kind of solid food until all traces of fever have disappeared is insisted upon, and when the patient does return to his ordinary diet, the resumption of solids is a gradual progress from soup to boiled sole, chicken, mutton, and soft vegetables. Beef-tea is carefully avoided so long as the temperature is abnormal, as it so frequently gives rises to troublesome diarrhœa. The carbolic acid combination is usually taken without trouble or difficulty. A day or two after commencing with it patients always complain that every thing they take tastes of the medicine; this is unavoidable, and need give no anxiety, unless vomiting is excited, when it is a good plan to reduce the dose of carbolic acid and to add a small quantity of dilute nitro-hydrochloric acid. It is easy to detect the smell of carbolic acid in the breath and perspiration, but I have rarely noticed carboluria. It must also be noted that not only does diarrhœa cease, but the opposite condition —namely, obstinate constipation—is generally induced. Aperients are decidely to be avoided; if the bowels do not act for some days, I administer an enema of warm soap-and-water, or of a small quantity of castor oil emulsified in warm water with the yolk of an egg. If after convalescence there is trouble in getting a regular evacuation, I give daily small doses of belladonna and salad oil. I do not think the remedy owes its antipyretic action to a direct influence on the vascular activity through stimulation of the vagus or th cardiac ganglia, but I lean to Dr. Rothe's alternative opinion that this undoubted action is the result of the causes being gradually overcome and removed. I cannot prove that the presence of carbolic acid in the system either arrests the production or destroys the already produced typhoid bacilli, but I firmly believe this to be the case. I also consider that the ulceration in the intestine is prevented, and ulcers already formed are induced to heal rapidly. No other remedies have in my experience proved reliable. I give stimulants without hesitation if necessary, and to assist recovery when a tonic is needed I prescribe bark and mineral acids.

In my note-book I have a rough analysis of one hundred and sixty cases. Seventeen were children, ten adolescents, and the remaining eighty-nine adult, the sexes of the total number being about equally divided. They belonged to all ranks of life, and the surroundings of some of the poorer cases were not conducive to cleanliness or the possibility of good sanitary arrangements. *The result in every case but one has been complete recovery*, and that one fatal case calls for the explanation that death did not take place until long after the fever was over, and from quite an accidental and adventitious cause. This case is as follows:

J. N——, aged twenty-eight, a badly-fed farm laborer, fell ill in September, 1882, and was carried safely through a smart attack of enteric fever by a strict adherence to the line of treatment indicated in this paper. Calling to see him one morning about four weeks from the commencement of his illness, the thermometer showed a temperature of 104°. This astonished me, as at my last visit a day or two previously it had fallen to the normal figure. On making examination I found under each arm a large axillary abscess. A few days afterwards I incised them both and they rapidly got well, though of course the patient was thrown back and weakened by this fresh drain on his vital resources. A fortnight after his recovery—that is, eight weeks from the typhoid invasion—his wife took the opportunity of a bright, breezy day at the end of October to scrub and clean the room they inhabited together. She conducted this operation with most praiseworthy assiduity, keeping both door and window wide open, her husband sitting on a chair in a direct line between them, surrounded by a sea of soapsuds. She did not neglect to scrub the floor under the bed, and seemed surprised at the reproof I administered when, on calling, I became an eye-witness to the above facts. Next day the poor fellow had a succession of rigors, and succumbed three days after to an attack of acute double pneumonia.—*Lancet*

THE TREATMENT OF ULCERS.—An article appeared in the London *Medical Record* for December 15, 1887, giving interesting details of the treatment of ulcers by phospohric acid, as shown by the experience of Dr. Grossich. By his method of treatment, he used a ten per cent. solution of pure phosphoric acid in distilled water. The ulcer is covered with a bit of lint dipped in this solution, and the dressing renewed three or four times a day. The patient for the first few minutes feels a slight burning sensation, but this soon passes, and with-

in twenty-four or thirty-six hours the ulcer cleans, and looks better. Inflammation or eczema of the surrounding parts disappear, and all pruritus ceases. The ulcer cicatrizes rapidly, and the cicatrix is firm and healthy. Kollischer treated tubercular affections of the joints with injections of the phosphate of lime, with great success. Dr. Grossich has also had good results with this treatment, and cites some very interesting cases The treatment by the solution of phosphoric acid was further employed in a case of tuberculous abscess of eight months' duration, and also a case of eczema marginatum which had lasted more than a year, and good results followed. The above suggests the superiority of Horsford's Acid Phosphate as a substitute for the phosphoric acid. The effective acidity of this preparation is about the same as the ten per cent. solution of phosphoric acid which is prescribed in the above treatment, and it may therefore be justifiably employed by the profession in the treatment of disorders of this character. It has the advantage of containing the phosphates in solution, notably the phosphate of lime. It follows, then, that all cases that require the phosphoric acid treatment can be more advantageously treated by Horsford's Acid Phosphate, and the suggestion is hereby commended to the profession.

Teaching Students to Think.—It is often a subject of regret to teachers in our medical schools that the work of the first two years is so soon forgotten; a man who has passed his preliminary examinations frequently so far forgets his scientific subjects in six months as to be unable, when in the hospital wards, to give a description of the cerebral supply to parts of the body, the convolutions of the brain, and the cranial nerves, or the minute anatomy of the kidney and liver; still, such students may have dissected dilligently, attended lectures, and read at night, but they have not learned to think, or are not trained to think systematically and correctly. This defect is, we suspect, not entirely the fault of the students, but is also in part due to defects in teaching. When observing students under examination, both for university degrees and on the lower examinations, it has often been obvious that failure to pass the standard may depend upon inaccurate methods of thinking and speaking—or upon no previous thinking quite as much as from ignorance of the subject-matter. Observing the objects of study in the dissecting-room does not necessarily teach thinking; to observe is to receive impressions, thinking may or may not follow observing. We have no intention of suggesting formal teaching of the laws of thought in the form of logic, though this useful science used to be one of the extra subjects in the Arts examination of the Apothecaries Society. It does, however, seem needful to call attention to the importance of educating students to think as well as to observe facts; the scientific subjects and the teaching of medicine afford plenty of scope for both. The student is generally interested in the application of scientific knowledge to practice, and to show him such connections early in his career stimulates thinking. The constant application of anatomy, physiology, chemistry comparative anatomy, and the principles and facts of vegetable biology, to what is seen in patients produces an expansion of the subjects of thought and engenders habits of correct thinking. To follow well-made analogies, and to answer questions which exercise the imagination in a scientific manner, as in describing the minute conditions of circulation and the cause of nerve currents in reflex actions, necessitates correct thinking. A student will often say that he hears a systolic mitral *bruit*, and is satisfied with his achievement, without understanding that the sound heard suggests an hypothesis which requires to be fully worked out before he can know the condition of the patient. A man well trained, not only in observation but also in rapid and correct thinking, will get through much more good work in practice than one less thoughtful. Thought, preceding action, guides him rapidly to make the necessary observations in the case before him, till thinking becomes automatic, and his opinions are rapidly formed upon brief observations, and what is ill termed "clinical instinct." In making these remarks we by no means wish to depreciate the necessity of thorough and systematic examination of all the organs as a matter of primary necessity.—*Brit. Med. Jour*

Tobacco Amblyopia.—(By A. R. Baker, M.D., Cleveland, Ohio: Abstract.) There is a diversity of opinions expressed, as well as a lack of uniformity of symptoms described as characteristic of this disease. Some eminent authorities assert that women never suffer from this form of toxic amblyopia, while a number of cases are reported as having occurred in England. Most observers believe that it results more frequently from smoking than chewing, but Dr. Ayres says the opposite is true. Calazowski says it is of frequent occurrence among persons working in tobacco manufacturing establishments. Dr. Ely, who spent much time in examining cigar-makers, says that it rarely if ever occurs among them. There is less diversity of opinion as to treatment, some claiming that it is absolutely necessary to stop the use of tobacco entirely, while others only limit the quantity used and advise a milder tobacco. Many emphasize the necessity of prescribing strychnia; others believe iodide of potash to be the *sine qua non*, and still others have found that their cases do equally well with no medication. Probably there is no one who has carefully examined the evidence adduced who doubts the existence of a toxic amblyo-

pia, characterized by a rapid failure of sight, a central scotoma for red and green, and no marked changes to be discovered with the ophthalmoscope. Dr. Powers has advised the inhalation of nitrate of amyl as of great temporary benefit. If there are no pathological changes in the retina, optic nerves, or cerebral centres, then the necessity for specific medication is uncalled for. I may thus summarize my conclusions on the subject :

1. There is a toxic amblyopia due to the excessive use of tobacco.

2. That the excessive use of alcohol, or other toxic agents, does not produce the same or a similar amblyotic condition, although by their depressing influence on the vital functions they may serve as predisposing causes.

3. Tobacco amblyopia does not usually lead to total blindness. The disease is essentially a functional one. Gross pathological changes have not been demonstrated either in the retina, optic nerve, or cerebral centers.

4. The course of the disease may result in a certain amount of failure of sight and then remain stationary, even though the tobacco habit be not entirely given up.

5. Stopping the use of tobacco will result in recovery of sight without the use of specific medication, although the use of strychnia and tonics, by increasing the general tone of the system, may hasten a cure. The moral effect of taking something to replace the loss of the tobacco is of great value.—*Am. Pract. & News.*

Rectal Feeding.—From a study on the subject of rectal alimentation, Dr Weaver (Transactions of the Luzerne County Medical Society) has formulated the following conclusions :

1. By the use of enemata life can be sustained indefinitely with little if any loss of weight to the body.

2. In a larger proportion of cases in which rectal aliment is used, true digestion, of albuminous, saccharine, and fatty food takes place by virtue of inhaustion, or a reversal of the normal peristalsis of the alimentary tract.

3. While this is the case, there are doubtless instances in which retrostalsis does not occur, and for that reason the food used should first be artificially digested before being injected into the rectum.

4. While milk, eggs, and brandy are the best aliment for rectal nutrition, no one article should be used for too long a time, but frequent changes should be made, observing the greatest care to prevent irritation of the rectum, or intolerance of that organ for the nutriment required.

5. The enemata should, if possible, be administered by the physician himself. Where difficulty in retaining the aliment is encountered, the colonic method is preferable, the food being propelled through a rectal bougie. The food should be of the temperature of the body.

6. The rectum having once become intolerant of the enemata, absolute rest must be given to that viscus for a few days, and reliance be placed on nutritious inunctions of the surface of the body.

7. For rectal alimentation there exists a wider range of usefulness than has heretofore been assigned to it. It is not only appropriate in the severer forms of chronic diseases of the stomach and œsophagus, but is indicated and should be utilized in the management of all acute diseases when, from any cause, the stomach becomes intractable and rebellious.

8. In diseases of the stomach, even where a portion of the food ingested is retained by that organ only to undergo fermentation, inducing thereby pain and distress, it is more logical to resort to rectal alimentation, not as an adjunct to, but a substitute for stomachal injection.

9. Certain organic lesions, as well as functional disturbances of the stomach, are curable by means of rest to that organ, and by no other means. In rectal alimentation we have a safe and sure means of nutrition, pending the necessary period of rest. —*Dietetic Gazette.*

Billroth on Mackenzie.—The *British Medical Journal* publishes the following translation of a letter addressed to the *Neue Freie Presse*, by Professor Billroth, dated March 27th :

"With reference to your request for my opinion on Mackenzie, I can only reply that I have always warned people against passing a judgment on a man who, as a physician, occupies so difficult a position. I have never doubted the correctness of the diagnosis of my Berlin colleagues, but I have also never been able to understand what political reasons had made it necessary to communicate this diagnosis to the whole world. It cannot be admitted that Mackenzie, with his vast experience, has ever doubted the correctness of this diagnosis. If he behaved in such a way as to imply that he had some doubt about the correctness of this diagnosis, this could only be owing to pressure from above, or from motives of humanity. I know such situations from my own experience. One is not inclined to disapprove the statements of one's *confrères*, but, at the same time, one is not inclined to tell the patient that his malady is incurable, for the known want of infallibility in medical diagnosis is almost the sole ray of hope to the unfortunate incurables. Falsehood, in such cases, becomes a moral act. The entire behaviour of Mackenzie must, no doubt, be judged from this point of view. He did as a man and a physician what was still possible to be done when the unfortunate word 'cancer' had already been pronounced.

"In much the same terms as these I have, on different occasions, expressed myself as to Mac-

kenzie's conduct. I ask you to consider this as a private communication, at least, until the sad catastrophe has occurred in Berlin."—*N. Y. Med. Rev.*

Scarlatina and Puerperal Septicæmia—I very much fear that the recent discussion on this subject may tend to diminish the wholesome dread of carrying scarlet fever to lying-in patients which has hitherto so powerfully influenced the conduct of obstetrical practitioners. That the infection of scarlatina is capable of producing a virulent form of septicæmia, generally unattended with local symptioms, I have not the smallest doubt. In April, 1863, I was called in to see a case of this kind occurring in a primipara. She was attacked about five days after delivery, and on the day following her husband was attacked with scarlet fever. He recovered very well, but she died after four days' illness. Her case was a typical one of what used to be called malignant puerperal fever. She had no rash of any kind, and no marked abdominal tenderness. We made a *post-mortem* examination, but found no uterine lesions and no sign of abdominal inflammation; but decomposition had set in most rapidly. In fact it was a case of blood-poisoning of the worst kind.

About fifteen years ago a medical practitioner (who has since left Bristol) called me in to a patient he had attended in her confinment for about four days previously, but who was attacked in a similar way to the case just mentioned, except that there was some abdominal tenderness. She died on the ninth day after delivery. About three days before she died her husband was attacked with scarlatina, but ultimately recovered. On making strict inquiry of the medical practitioner who attended her, he acknowledged that the time when the husband came to fetch him to his wife, his own children were lying ill of scarlatina.

There can be no doubt that in each case the husband and wife were infected from the same source—in the first instance, I believe, from a servant; and in the second from the medical attendant himself. I have seen many similar cases of these, but not of so well-marked a character. We know that people who have once had scarlatina are generally protected against a second attack, but yet that, if they are again exposed to infection, they may get troublesome sore throats in consequence. In the same way I believe that a puerperal woman who has had scarlatina before may get a sufficient amount of the poison to induce fatal septicæmia—unaccompanied, however, with the rash or other characteristic signs of scarlatina. The poison of scarlatina is of so subtle a character, and creeps in through so many channels, that ordinary antiseptic treatment is of little avail against it.—*Br. Med. Jour.*

Calomel in Phagedæna.—I had a case of phagedænic ulceration of the under surface of the glans penis under my charge last August, which defied the recognized treatments of this disease. I applied nitric acid in the most thorough manner on six different occasions during a period of eighteen days without success. I then applied pure carbolic acid, but the disease again returned. Constitutional treatment with opium was adopted throughout. For six days the patient sat in a hot-water hip-bath on an average about four hours daily, without any appreciable effect on the course of the disease. The condition of the penis on the twenty-first day was as follows:

A large ulcer existed, covering the entire under surface of the glans, moulding it like the mouth-piece of a flute, and extending to the reflected foreskin in the vicinity of the ulcer. A third of the glans had been destroyed. The surface of the ulcer was covered with a reddish-grey secretion, irregularly disposed, and pierced here and there by large red granulations. The edges were angry and undermined.

I applied calomel powder on the twenty-first day of the disease, spreading it thickly, and pressing it well into the interstices of the ulcer. The calomel acted like magic; the ulcer began to heal rapidly. Now and then a suspicious spot appeared, but it was at once dissipated by a thorough application of the calomel. The patient made an excellent recovery, and was very pleased at the result, for he believed he was going to lose the whole affair. I was tempted to use calomel, as I had found it very useful in all forms of syphilitic ulceration.—*Br. Med. Jour.*

Formula for Terpine.—At a meeting of the Therapeutical Society of Paris, M. Vigier recommended the following formula for terpine, which contains seven and a half grains to the teaspoonful: R. Honey, glycerine, of each 100 grs.; alcohol 95 per cent.; terpine of each 7½ grs.; M. Sig.—Teaspoonful, a dose.

The terpine remains dissolved if mixed in the strength of a teaspoonful to a glass of water. A smaller amount of water than this causes the terpine to precipitate.—*Progrès Médical.*

Dr. Sittler, of Bowmanstown, Pa., writes as follows:—I have used Tongaline extensively during an epidemic of Dengue or break-bone Fever, where I had an opportunity to test it very thoroughly, and I secured much more successful results from it than from the ordinary treatment, consisting of pot. iod. vini. colchici. acid salicyl. quin. sulph. etc. In every instance Tongaline fully sustained the high character with which it is presented to the profession, and only deserves to be well known in order to be thoroughly appreciated.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

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MEDICAL ASSOCIATIONS.

It may not be inopportune to remind our readers of the good work done in medical societies. Everyone is aware of the almost irresistible tendency to get into grooves, and, in daily practice to adopt too much routine. With many practitioners their treatment of to-day is precisely what it was ten or twenty years ago, their knowledge has concentrated itself into a few "practical details" whilst from a scientific standpoint they are wonderfully behind the times. This state of things may result from many conditions. The demands which press so constantly upon the medical practitioner generally, the ill luck which has given him a troublesome case just at the time he has arranged to attend the society's meeting, or the desire, which we believe prompts but the few, of being careful to "look after practice" which is attended by more successes in his neighbors abscence, are some of the predisposing causes. Although the results of the progress in medicine have not been all that carping critics demand of it, yet its yield has been well worth the time and labor spent in obtaining it, and no one with any claim to being well informed can do without adopting some of the more modern principles and suggestions; and the difficulty which every one experiences in determining what is reliable and what is useless will be materially lessened after the ventilation and discussion such subjects receive at an ordinary meeting of medical men. It is no excuse that because a previous meeting happened to be in a measure unprofitable, subsequent ones should not be attended. It is a duty which everyone owes to his profession and the public to attend and support such meetings and associations, since by them alone can medicine make great and useful advancement. By the united evidence there given, can those careful and constant workers in science receive that encouragement and acknowledgement which they deserve. And apart from the scientific and special uses of the medical associations in the daily practice of a physician, it is in, and by such associations, are cultivated and developed those nobler traits of character and that kindliness of heart with which the members of the medical profession are so replete. Often at such meetings have differences been removed and old friendships revived which form the pleasantest reminiscences of a whole life. It is but a poor man who can attend such gatherings and go away unprofited. If a meeting happens to be less instructive than one expected; if in results it did not suit you, carefully enquire the reason. Did *you* do the part specially allotted you. It is unfair to throw the whole brunt of the work upon two or three prominent officials. It is manifestly unfair to hold the president of an association accountable for the only partial success of such meeting, when members in committee have given but indifferent support and imagined their names appeared in such places merely out of compliment and attached no work or responsibility. Each has his duty to perform, if he cannot entertain by reading a paper, he can encourage by careful attention, assist by careful discussion, and thus add directly to the success of the meeting. The programme is generally arranged to allow ample time for pleasure as well as business, and should be carefully followed. If all the members were away sight-seeing and on pleasure excursions there could be nothing done.

We sincerely hope these few remarks will be remembered and be in time to benefit the meeting of the Canada Medical Association to be held in Ottawa on September 12th, 13th and 14th next, and that members of the profession will feel it their duty to attend. It is said the public do not sufficiently recognize the work done by the profession. The fault lies with ourselves. Our voice, when raised, is often enfeebled from lack of interest and enthusiasm, and our influence undervalued because it is not concentrated.

THE SOUP BATH.

The importance of tiding children over a considerable period of time, in certain chronic diseases of the bowels, is appreciated by every practitioner. When the bowels are in such a condition that even the blandest foods act as irritants, and the digestive processes are very imperfectly performed, nourishment cannot be administered in quantities at all commensurate with the wants of the system, and the child eventually sinks from pure inanition. If the stomach does not reject food, enough may be absorbed in that organ to keep nutrition fair, for some time; but, as is a common experience, the simplest alimentation is sometimes too much for the stomach, and other means have to be sought to keep up the patient's strength. Rectal feeding may be useful, but in the great majority of these cases, the lower bowel is in so irritable a condition as to be intolerant of even the most carefully prepared and administered nutrient enemata.

Inunction with some of the oils, preferably olive oil, will aid other measures, the abdomen being the region usually selected for the friction, which should be gentle and produced by the warmed hand of the nurse. A table-spoonful or two may be thus used two or three times a day. But in such cases, says Dr. Hopkins, in the *Medical Record*, "the soup bath becomes a boon beyond all price. It not only relieves the thirst (which may be accomplished also by prolonged immersion in tepid water) but imparts sufficient nourishment to tide the patient over the critical period. We have known a child's life most evidently saved by this simple means. Let some pieces of mutton or other meat, sufficient for making two or three gallons of good soup, be first simmered for an hour and then boiled sufficiently long to thoroughly soften and extract the juices. In skimming, do not take away all the fat. The latter may be skimmed off while cooling and kept warm for inunction later. Pour the soup, when ready, into the little bath-tub, and, when sufficiently cool, immerse the child in it for a period of twenty minutes. It should, of course, have sufficient depth to cover the entire body, the head being supported by the nurse's hand. This should be repeated twice daily, the bath being re-warmed for a second use, and a fresh soup made if possible, each day. Let the bath be followed by inunction of the entire body with the warm fat that was set aside. After two or three days, if the case improves, the stomach will begin to retain light nourishment."

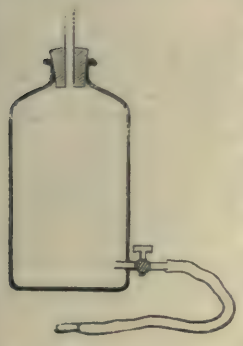
THE GERMAN SURGEONS' REPORT.

Now that the Emperor Frederick is dead, and the Empress has, by her accession, received the property which could not have come to her had he never ascended the throne, the German surgeons are showing up Mackenzie in a manner that will not be approved of by the profession, and which will have the effect of lowering the estimation of medical science and skill in the eyes of the whole world. It is easy to be wise after the event, and the reports submitted by Drs. Bergmann, Schroetter and Gerhardt show this wisdom in a large measure. They "knew all along" what was the trouble, and would make it appear that Mackenzie removed a healthy piece of larynx, which Virchow diagnosticated as *pachydermia laryngis*. This sounds rather absurd on the face of it. We shall, no doubt, be left in the dark as to the true inwardness of the case for some time to come, Dr. Mackenzie keeping very quiet, and only giving an outline of a more full and complete report to come. In this short report he says:

"In my opinion the disease from which the Emperor died was cancer. The morbid process probably commenced in the deepest tissues of the cartilaginous structures of the larynx, and they became affected at a very early date. A small growth, which was present when I first examined the late Emperor, was removed by me by several operations, and all the portions taken away were submitted to Professor Virchow. He was unable to detect in them any evidence of the existence of cancer. Examinations made at the beginning of March by Professor Waldeyer, however, led to the belief that cancer was then present. Whether the disease was originally cancerous, or assumed a malignant character some months after its first appearance, it is impossible to state. The fact that perichondritis and caries of the cartilages played an active and important part in the development of the disease, no doubt largely contributed to make it impossible to form a decided opinion as to its nature till quite a recent date."

THE STOMACH-PUMP SUPERSEDED.

Dr. D. Yellowlees writes as follows to the LANCET:—The recent correspondence as to the use of covered funnels in feeding by the stomach tube, leads me to give greater publicity to a far better contrivance, which I devised many years ago, and constantly use here. An ordinary twenty ounce bottle, perforated near the bottom by a small tap for the admission of air, and a long stomach tube bearing a cork which fits the mouth of the bottle, constitute the whole apparatus. The food being mixed in the bottle, the tube is introduced, the cork placed in the mouth of the bottle, the bottle inverted and raised, and the air-tap opened, when the food passes quickly into the stomach in a continuous stream. Great injecting force can be at once applied, if required, by *blowing* through the air-tap, to which a small rubber tube is attached for this purpose. For simplicity, cleanliness, efficiency, and perfect inspection, this plan leaves nothing to be desired, and solid nourishment can be thus given in many forms, as there is no tap to obstruct its passage, and as the food can be kept in agitation within the bottle during administration. No one who has used this contrivance will wish for any other. It is equally available for emptying the stomach, by lowering the bottle and establishing a syphon action by suction.



SULPHONAL.—It would appear that experience confirms the first statements regarding the therapeutical effects of this drug. Dr. Rosin, says the *Br. Med. Jour.*, concludes as follows:—"On the whole, sulphonal in doses of two grammes is as certain in its effects as morphine or chloral, and in cases of simple insomnia may be recommended in doses of double that strength, on account of its freedom from after-effects." The same authority says that Dr. Oestreicher, having observed the effects of sulphonal on fifty patients, some nervous and some phthisical, concludes—"that in moderate doses—that is, two grammes—this drug is a non-injurious hypnotic. Respiration, pulse, and kidney-secretion were unaffected; the effects of persistent use are, of course, unknown at present. It is best given in capsules or tabloids, from its insolubility in water. Oestreicher finds it without smell or taste; Rosin states that it has a slight bitter taste. Sleep sets in more slowly than after chloral or morphine in corresponding doses, but lasts longer."

ANOTHER DANGER FROM ETHERIZATION.—Dr. Hare, of the University of Pennsylvania, has drawn attention (*Therap. Gaz.*) to the fact that the temperature of patients subjected to tolerably prolonged etherization for operation varies as much as three degrees. This was not due, he believed, so much to the shock of the operation as to the anæsthetic. It is quite common to find it necessary to apply artificial aids to patients who have been removed from the operating table to restore heat to the chilled surface, especially when ether has been used. Experiments made on dogs shows that the rectal temperature may be reduced from 8° to 10° F. by giving five drachms of ether every five minutes for an hour. It is suggested that surgeons would do well to combat this action of ether by heat giving appliances while the patient is undergoing the operation.

A SANITARY Convention and meeting of the Executive Association of Health Officers, under the presidency of Dr. P. Palmer Burrows, will be held by invitation of the Mayor and Council of Lindsay, on Tuesday, Wednesday and Thursday, the 14th, 15th and 16th of August, 1888. As subjects of general interest to every city, town, village and hamlet will be discussed, and papers presented by eminent scientists, it is hoped that every place will be represented. Reduced fares have been arranged on Canada Pacific and Grand Trunk Roads (fare and a third). Those wishing a pleasant outing should visit Lindsay during the Convention.

ANTIPYRIN IN LABOR.—The effect of antipyrin enemata was found by Laget, (*Therap. Monat.*) to be the rendering of the contractions of the uterus in very severe labor, entirely painless. Steinthal succeeded by an enemata of two grammes in a cupful of water, in rendering painless the unbearable "pains" of a primipara who had been suffering twenty hours. The force of the uterine contractions seems to be in no degree lessened. Other observers have noted the same results.

Canadian Medical Association.—The following papers have already been promised for the Canadian Medical Association meeting, which will be held in Ottawa on the 12th, 13th and 14th of September: "Face Presentation," Dr. W. M. Mackay, Woodstock; "The Mortality of Pneumonia," Dr. Wm. Osler, Philadelphia; "The Duty of the Medical Profession under the Public Health Act of Ontario," Dr. Wm. Canniff, Toronto; "On Some Minute but Important Details in the Management of the Continuous Current in the Treatment of Fibroid and other Diseases of the Uterus," Dr. A. L. Smith, Montreal; "A Case of Resilient Stricture of the Urethra cured by Electricity," Dr. A. L. Smith, Montreal; "On the Treatment of Varicocele and Orchitis by the Electrical Current of Tension," Dr. A. L. Smith, Montreal. Papers have also been promised by Drs. Fenwick, Shepherd, Alloway, Blackader and Bell, of Montreal.

Cascara Sagrada in Rheumatism.—Dr. H. T. Goodwin says *(N. Y. Med. Jour.)* he has used cascara sagrada in about thirty cases of rheumatism with the most beneficial results, except in three or four where there was a syphilitic taint. If the bowels are acted upon too freely by it, the writer recommends the administration at the same time, of one of the preparations of iron. The explanation of its action is still to be sought, the writer gives his experience simply.

For Neuralgia.—Dr. Richardson recommends *(Asclepiad)* the following formula in neuralgia:—

R.—Croton chloral . . . . . gr. ij.
Quinia . . . . . gr. ij.
Glycerin . . . . . q. s.
M. fl. pil.

One to be taken when the attack threatens, and to be repeated every two hours until relief is obtained.

As the world advances old landmarks and aphorisms give way. Thus, the ancient proverb has it, says the *Western Druggist*, "You cannot get more out of a bottle than you put in it." That's an error. Besides what he put in, he can get a headache, a sick stomach, and perhaps ten days in the lock-up.

The Council Examinations will be held in Toronto in September, commencing on the 18th.

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Dr. Lawson Tait, has succeeded in curing six out of eight cases of acute suppurative peritonitis, of various origin, by laparotomy and drainage.

We are pleased to note that Dr. G. Sterling Ryerson has been presented at Court by Lord Wolseley. The Dr. was the sole American representative at the Donder's festival at Utrecht.

British Diploma.—Dr. Gilbert Gordon of Toronto, has lately taken the Diploma of L.R.C.P. & S. Edin. and L.S.P. & S. Glasgow.

Dr. John Milner Fothergill, M.D., Edinburgh, author of a number of medical works, died lately of diabetes, from which he has suffered for a number of years.

We regret that the name of Dr. Peters was by an inadvertence omitted from the list of those appointed to the extern department of the Toronto General Hospital, in our last issue.

We beg to direct attention to a new and elegant preparation of Effervescing Antipyrin, prepared by Lyman Bros. & Co., notice of which will be found in our advertising pages. The name of this firm is a sufficient guarantee of its being carefully prepared.

We are constantly in the receipt of letters testifying to the very excellent quality of Dr. Jerome Kidder's electric batteries. We have pleasure in specially recommending them, for we conscientiously believe them the best in the market. Although an American instrument, and hence requiring the payment of duty to bring them into Canada, yet practitioners will do well to communicate with the Kidder Electrical Company if in need of electrical apparatus.

We have received from the agents of Henri Nestle, Vevey, a photograph of a group of medals awarded to Nestle's Milk Food by thirty juries in all quarters of the globe. Accompanying the photograph is the brief but significant request that we note the unusual, and hitherto unattained, award of twelve diplomas of honor having been given Nestle's milk food. We have known of Nestle's Food for some years as being one of several infants' foods in the market, but we are free to confess we have not hitherto known that this food enjoyed such evident pre-eminence in European centres as the group of medals sent us would indicate. Any preparation that goes into competition before the juries of thirty World Expositions, and bears away eighteen gold medals, and in twelve instances the coveted diplomas of honor, must possess a very high order of merit.

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